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AIRLINE SELF-SUFFICIENCY AND THE LOCAL AIR SERVICE PROBLEM

By Dole A. Anderson

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THE problem of the local service carrier in the domestic air transport system of the United States is one of the most troublesome results of the new attitude toward subsidization. The impact on air transportation of the nation's declining tolerance for subsidies to business has led one editor to the opinion that "the promotional stage of air transport in the U. S. has reached an end."[1] Certainly, the freedom with which the Civil Aeronautics Board has promoted in the past, with only minor obligations to explain and justify its actions to Congress, will be limited. Until recently, the policy of the Board was to consider the domestic industry in two parts; the trunk lines, whose progress as a group into self-sufficiency was a source of encouragement, and even concern, as the possibility of excessive profits arose,[2] and the local service carriers, whose financial progress and prospects continued discouraging and who ought, therefore, to be looked on as a secondary air transport system requiring substantial and continuing subsidy assistance.[3] Now, however, the new attitude that the air transport industry ought to be self-sufficient may force consideration of the two parts as one industry only, with very great differences in earning power among its members. Apropos, then, would be Charles Lamb's

[1] American Aviation, August 17, 1953, p. 8.

[2] *In the matter of The General Passenger Fare Investigation, etc.* Civil Aeronautics Board Order Serial No. E-7376, decided May 14, 1953. "The Board has considered the latest available earnings reported by the domestic trunkline carriers, as well as those reported for recent years, and it believes that, looking at these years alone, such earnings must be considered excessive when measured by any reasonable standard applicable to a regulated industry." p. 5.

[3] ". . . the trend since World War II has been in the direction of providing service to marginal points through a secondary airline network which is clearly not self-supporting. The support of this secondary system by the government is based upon an amalgam of political and social considerations rather than on economic justification." Paul W. Cherrington, "Objectives and Strategies for Airline Pricing." 18 Jrl. of Air Law & Com. 254-5 (Summer, 1951).

description, in his essay "Poor Relations," of that embarrasingly less fortunate member of one's family as ". . . the most irrelevant thing in nature, . . . a preposterous shadow, lengthening in the noontide of your prosperity, . . . a drain on your purse — a more intolerable dun upon your pride, . . . a triumph to your enemy — an apology to your friends." What shall be done with the poor relations of the air transport industry?

This current problem of the impact of the decline of promotion on that most promoted part of the domestic air transport system is, of course, only an aspect of the larger problem of inequalities in the earning power of a group of companies whose individual survival is important to society. For, since poverty is relative, the relatively poor shall be with us always. The combination of a) differences in cost levels among the companies as a result of market- and route-structure differences, and, b) the more or less uniform fare levels required as a practical matter where the companies compete at a number of points, give rise to large inequalities in earning power which are as difficult to live with as to get rid of, as is demonstrated by the weak-and-strong-carrier problem with which the Interstate Commerce Commission has toiled for over 30 years.

This paper will be concerned with aspects of the general problem of the earning power of our domestic air transport companies (in public utility terminology, the general rate level and its control by regulation) with special emphasis on the weak carrier as exemplified in the local service carriers. It will assume no change in the basic policy of public utility regulation of air transportation in the United States.[4] More than that, it will explore some possibilities for the more extensive use in air transport regulation of regulatory devices well developed in the older public utility industries.[5]

Inadequate Earning Power Among Air Carriers

It is appropriate, first, to review the answers to the questions: where, in the domestic air transport industry, is weakness in earning power to be found, and, what have been the causes of this weakness.

[4] The view that we ought to abandon all economic regulation of air transportation, or those parts of the present regulation which serve to protect the revenues of the existing carriers, has many strong points and many advocates. See, for the most thorough analysis, Lucile Sheppard Keyes, "Federal Control of Entry into Air Transportation," Harvard University Press, 1951. It is the present author's opinion, however, that in view of the impossibility of predicting the performance of the industry if it were free of public utility regulation, our present system, with modifications, offers greater public benefit.

[5] The Civil Aeronautics Act is similar in all important respects to other public utility regulatory statutes, either for transportation companies or the "local" public utilities; it differs from most in its provisions for promotion of air transport development with federal funds. (For a discussion of this point, see Oswald Ryan, "Regulation of Air Transportation under Civil Aeronautics Act. An analysis of the similarities and dissimilarities of air carrier regulation as compared with regulation of older forms of utility service." Public Utilities Fortnightly, Nov. 24, 1949, vol. 44, pp. 695-703.) As promotion declines, and as the use of competition as a regulator is relied upon less and less (a possible trend to be discussed later in this paper) the regulatory functions of the Board will become increasingly important and the Board may come to resemble more and more the other regulatory commissions in its actions.

There is general agreement that inadequate earning power is to be found among the smaller trunk lines, or small regional carriers, and among the local service carriers. For these carriers, non-mail revenues have failed to cover operating costs by the largest margins, year after year, and there is no reason to expect a significant change in this situation. There is not, however, agreement as to the reason for these inadequacies in earning power.

The Reasons for Inadequate Earning Power

The earning power of a company is, of course, the difference between its revenues and its expenses, related to the investment required to produce the service. A firm under public utility regulation is, by its relative freedom from competition, more or less in control of its revenues as well as its expenses; the resulting monopoly profits are, therefore, controlled by the regulative agency in the public interest. Under conditions of competition, the unit revenue or market price is given, and the firm's managers must meet it by control over costs or go out of business.

The rise of competition between air carriers thus emphasizes the importance of the unit cost level of the firm. It has been observed that under the zonal- or regional-monopoly system of routes which the Board inherited from the Post Office, a small company might achieve self-sufficiency because, being free of heavy competitive pressures on most of its system, it could control both its costs and its revenues.[6] With the great increases in parallel competition since then, control over revenue has largely disappeared as a carrier's fare-level was dictated by others, and his share of a market often bore little relation to his own efforts.[7] And, holding one's own, costwise, has become in part a function of the size of the firm.

> ". . . effective competition can exist only between carriers who are so constituted that inherently they have comparable unit operating costs. Moreover, since the size and character of the markets served by the carriers—a matter controlled by their route structures—have a primary influence on the unit costs which they can attain, the Board . . . had to keep ever in mind the necessity of insuring to each carrier a system of sufficient size to take advantage of the lower costs of volume operations."[8]

Although the precise significance of economies of large scale among the medium- and large-sized air carriers is not clear, there is agreement that, by any measures, the very small trunk-line carriers are uneconom-

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[6] Howard C. Westwood, "Choice of the Air Carrier for New Air Transport Routes." The George Washington Law Review, Feb., 1948, vol. 16, p. 222.

[7] See F. W. Gill and G. L. Bates, "Airline Competition." Harvard University Press, 1949, pp. 616ff.

[8] Civil Aeronautics Board, "The Role of Competition in Commercial Air Transportation." Report to Subcommittee on Monopoly of the Senate Select Committee on Small Business, Nov. 24, 1952, p. 6.

ically small.[9] The same conclusion must hold true for the local service carriers, the largest of which is comparable in size to the smallest trunk line. The large local service carriers have been experiencing unit cost levels which are similar to those of the smaller trunk lines, and which are the lowest of their local service group.[10]

But is the size of the firm the critical point in an airline's ability to achieve self-sufficiency? Suppose that to an airline which is not self-sufficient at the present time were added additional markets identical in character to the average market presently being served, so that the average traffic generated per station, the average flight distance, and the average passenger haul were unchanged. Would the airline then be any closer to self-sufficiency? According to the analysis of Professor Koontz, its cost level might decline significantly only if it were one of the very small carriers. For those trunk-line carriers not among the self-sufficient Big Four, the answer to self-sufficiency lay in improving the revenue load factor by improving the size and density of the markets facing the carrier, that is, in large traffic-originating cities and in heavy traffic-flow city-pairs.[11] These conclusions would seem to apply with even greater strength to the local service carriers, where the weak markets result in inadequate revenue, and the small size of the firm results in excessive unit costs.

Competition As a Cause of Carrier Weakness

The creation of competition between air carriers by new route and service certification of the Civil Aeronautics Board has been widely discussed as a cause of inadequate earning power of the industry and of particular carriers. The Board has been forced to defend itself before different Congressional committees against the opposite charges that it had created too much competition and that it has fostered too much monopoly; a former member has recently observed that the Board has had no policy and no administrative "expertise" with respect to the amount of competition necessary to secure sound development of air transportation, and that it has ". . . boxed the compass a dozen times

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[9] See Harold D. Koontz, "Economic and Managerial Factors Underlying Subsidy Needs of Domestic Trunk Line Air Carriers," 18 Jrl. of Air Law & Com., 127-56, and "Domestic Air Line Self-Sufficiency: A Problem of Route Structure," American Economic Review, vol. 42, pp. 103-25, March, 1952; especially the latter article at p. 109ff. The conclusions here are in agreement with Gill and Bates, *op. cit.*, p. 617, and with earlier studies of the relation between firm size and operating cost levels. All of these studied have considered only the domestic trunk-line carriers.

[10] Civil Aeronautics Board, *Recurrent Reports of Mileage and Traffic Data and of Financial Data*, 12 months ended March 31, 1953.

[11] John P. Carter, in a critical note on Professor Koontz' analysis ("Domestic Air Line Self-Sufficiency: Comment," American Economic Review, vol. 43, pp. 368-73, June, 1953, to which Koontz made a rejoinder at pp. 373-77.) observed that the success of some airlines might be the result of few small markets rather than many large markets and that the inability of other airlines to achieve self-sufficiency was due to their planes being too big and not to their markets being too small. Although this discussion was limited to the trunk lines, Carter's rewording makes the conclusions particularly good descriptions of the problem of the local service carrier.

on the point."[12] Certainly there has been much uncertainty, and Board action could not be successfully predicted.[13]

Experimentation by the Board (or wavering) in the amount of competition was perhaps inevitable under the somewhat conflicting statutory requirements of "competition to the extent necessary" for firms which were restricted in their entry to a particular market by that device for creating legal monopolies in the public utility field — the certificate of public convenience and necessity. The Board had to steer some "in between" course in a situation like the mythological Charybdis and Scylla. On the one hand lay the stern rocks and monster of monopoly; on the other, the treacherous whirlpool of excessive competition. If the course taken has shown wavering, and if it has been dangerously on the edges of the whirlpool, the Board's seamanship was only part of the explanation. The winds of optimism and the currents of unjustifiable pressure on the Board have played their part, too.

Regulation by Competition

In one respect, the growth in competition has special interest for the argument here. The Act, in common with other utility statutes, gives the Board, in Section 404 (a), control not only over the rates charged, but also over the quality of service rendered by, an air carrier. Thus far in the administration of the Act there has been little use of the power over service adequacy, except in the case of the local service carriers where, for example, the requirement of a minimum of two daily round trips over a route segment has been common. But in the case of these carriers, competition has not been available as a device to assure adequate service because the thin market would not support a second carrier.

In general, the Board's attitude has been that competition would achieve far more effective regulation of the quality of service than would its own directives.[14] There is much to be said for regulation by competition, as the philosophy of the relation between government and business in the United States attests. It is automatic and therefore

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[12] Harold A. Jones, "The Anomaly of the Civil Aeronautics Board in American Government," 20 JRL. OF AIR LAW & COM. 150 (Spring, 1953).

[13] This, however, is no different from any attempt to predict Board action in a certificate case by reasoning by analogy from earlier decisions, as Westwood, *op. cit.*, has detailed. Unfortunately, air traffic predictions, an important part of the data underlying Board decisions on competition, have not had much greater success. The optimism inherent in a new industry's early years is one thing; the expectation of a continuation of early percentage rates of growth measured from a small base is another thing, and unwarranted, of course, by arithmetic alone. A child who, on its second birthday, shows any signs of gloating over a 100% increase in its age in one year ought to be reminded: a) that it can never do it again, as long as it lives, and b) everyone else has done it before,—once. This seems to have been forgotten in some predictions.

[14] "The improvements which flow from a competitive service cannot be obtained by administrative fiat. There is no regulation conceivable which could assure courtesy by a carrier's employees, for example, and it would be extremely difficult to attempt to dictate many other matters affecting the quality of the service rendered." *Colonial Airlines, Inc. et al., Atlantic Seaboard Operation*, 4 C.A.B. 552, 555 (1944).

it economizes in government coercion. But it is ruthless in its assumption that the survival of any one firm is of no great social consequence. Where the individual firm's survival *is* a matter of importance, as in air transportation today, competition as a regulatory weapon must be used with a light touch — lighter, very likely, than the Board was capable of in the environment of the post-war years.[15]

It would seem that regulation by competition is an attitude more in keeping with the promotional, than with the self-sufficiency, age of air transportation. It makes a permanent alteration in the market structure which, in the event of errors in estimating the competitive impact, will have to be lived with, not covered over with additional subsidy. The Board has recognized the limits to competition as a substitute for its own regulation.[16] The recognition that there is little room for new parallel competition suggests that the Board, in the future, will have to make greater use of its powers over adequacy of service.[17]

The Specialist Doctrine and Self-Sufficiency

A decade ago the Board embarked upon its largest promotional program: the planned development, on an experimental basis, of air service in the small-city, short-haul market.[18] An essential part of the experiment was the doctrine of the specialist, that is, that a new type of service requires a new type of operator, one who will offer only some of the services, or serve in only some of the geographic markets, which the trunk-line carrier had been serving. The thinking behind the doctrine is illustrated in the following quotation:

> "The type of service we here visualize involves *an entirely new type of service* gauged to meet the needs of smaller communities and relatively short hauls. In view of the limited traffic potentialities of the points on the new system, an unusual effort will be required to develop the maximum traffic. Greater effort and the exercise of managerial ingenuity may be expected from an *independent local operator* whose continuation in the air transportation business will be dependent upon the successful development

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[15] A whip may be an effective way to increase the output of a horse, but the horse must understand and he is being urged on to greater achievement, and not beaten to death. Also, of course, the right horse must be whipped. In the 1949 Air Freight Case, where the Board thought the certification of cargo specialists would provide a continuing spur of competition to the non-specialists. Member Jones criticized the argument because the spur was applied most sharply to the very carriers who needed it least. (p. 41 of the Jones dissent in *Air Freight Case, etc.* Order Serial No. E-3085, decided July 29, 1949.)

[16] To the contention of a feeder carrier that a trunk line's service had been inadequate, the Board stated, "In the event the present service does not adequately care for the needs of the interested cities, United could increase the number of its schedules. If it fails to meet its duty in this respect, there are appropriate measures provided by the Act. Certainly the remedy for inadequacy of service does not lie in the creation of new routes where the traffic volume is insufficient to support competition." *Additional California-Nevada Service,* Order Serial No. E-2935, decided June 15, 1949, pp. 9-10.

[17] The decision in *Southern Service to the West Case,* Order Serial No. E-5090 contains implications of this approach.

[18] *Invvestigation of Local, Feeder, and Pick-Up Service,* 6 C.A.B. 1 (1944).

> of traffic on the routes and the operation of the service on an adequate and an economic basis."[19]

This doctrine has been the justification for the selection of new companies in preference to trunk-line applicants throughout the period of the creation of the local service industry. The Board apparently has not abandoned the doctrine,[20] and those carriers whose existence rests on the doctrine naturally support it today.[21]

The specialist doctrine, however justifiable for an era of almost unlimited promotion, is a highly questionable concept for an era when self-sufficiency is the goal, for it seems to demand a high price for some meager benefits. The purpose of the doctrine was to get the greatest possible development in a market which was admittedly inadequate. It seemed that the more of a specialist a firm was, the better a specialist it would be. That fact, together with the clear need for minimizing the competitive impact of the local service carrier on the trunk line, has led the Board to impose many restrictions on the local service carriers which have had the avowed purpose of keeping them different. For example, they must serve intermediate points whether the traffic demands such service or not, for in the absence of such an obligation, they would be little different from, and often directly competitive with, the trunk lines. Or, the attempt of a local service carrier to equip its fleet with a post-war, trunk-line-type, plane had to be disapproved because among other reasons, such a step would eliminate a difference between a local service carrier and a trunk line carrier and endanger the local service experiment.[22] Thus, a substantial part of the difference between the two types of carriers has been created. The local service carriers have argued, quite correctly it seems, that these many and various restrictions have hindered their progress to self-sufficiency; they are thus put in the unhappy position of arguing that they deserve to exist because they are different, but that they cannot continue to exist unless they are made the same.[23]

The Distinctiveness of the Local Service Carrier

The result of being created different and kept diffrent is that the local service carrier shows a number of characteristics different from the trunk line. It originates its passengers in smaller cities and hauls them, on the average, shorter distances than the trunk-line carrier. It

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[19] *Rocky Mountain States Air Service*, 6 C.A.B. 695, 736-7 (1946). Italics supplied.

[20] See, *Service to Fargo, North Dakota, Case*, Order Serial No. E-7547, decided July 10, 1953, p. 12.

[21] See, for example, Leslie O. Barnes, "The Case for the Local Service Airlines," 20 JRL. OF AIR LAW & COM. 199 (Spring, 1953). "There is a vast difference between a trunk line operation and a local service operation. Different techniques are employed, different equipment is required—both in the air and on the ground. The two types of operation do not mix in an operational sense, and the concept is growing that an airline must specialize in either one or the other."

[22] *Pioneer Air Lines, Inc., Mail Rate*, Order Serial No. E-7225, decided March 13, 1953.

[23] See, for example, the list of obstacles to feeder line progress in the statement of Robert J. Smith, in "Separation of Air Mail Pay from Subsidy," Hearings before the Senate Committee on Interstate and Foreign Commerce, June-July, 1951, pp. 449ff.

operates two-engine pre-war equipment, not two- and four-engine post-war planes. There are other, less striking, differences. But, are these differences of the kind that make the services mutually exclusive in a business sense? Are the differences of the sort which would characterize a baker who also operates a dancing school, or of the sort which characterizes a baker of bread who also bakes cakes, or who operates a small grocery store in the front part of his bakery? Are the two operations such, that if combined in one organization and performed by the same persons, success in one would be wholly independent of, or prejudicial to, success in the other? That, clearly, is the question, and not the mere fact of differences in service or operation.[24]

Accepting the arguments above that the differences in the two services are forced and insignificant, it is still possible that the local service carriers have, by reason of their concentrated efforts, achieved such significantly better results in generating traffic at small points that they ought to be preserved despite their diseconomies. This is a point which could be proven by an historical study of traffic generation at a homogeneous group of cities served exclusively by each type of carrier.[25] If the local service carriers have not been able to generate a substantially larger amount of traffic than a trunk line develops in the same type of small city, then one of their reasons for being is destroyed.

There can be little doubt today about the absence of any economic basis for local air service. The fears of the Board, when it first examined the problem in 1943, concerning the thinness of the small-city, short-haul market have since then been fully documented. Public transportation in the United States is mass transportation, except for the irregular contract taxi services. It is difficult to imagine technological conditions in aviation which will make the boarding of one passenger per flight, for flights over relatively short distances, economical in comparison with the more flexible forms of surface transportation, except in a handful of isolated communities in the United States. The re-

[24] In the record of the *Air Freight Case* where the freight specialist argument was accepted by the Board, Member Ryan has been quoted as follows: "The refrigerators made by the General Motors Corporation, I imagine, are not any less efficient refrigerators because the General Motors Corporation happens to be engaged in the manufacture of automobiles. . . . There may be other reasons why you should be certificated but it seems to me that that kind of a reason is not sound economics." *Supra*, p. 27 of the Jones dissent.

[25] The author has attempted a comparison of traffic generating powers (from the C.A.A.'s Enplaned Airline Traffic by Community, 1951) for all small communities receiving service from a single carrier in 1951. Cities receiving service for less than one year, and the five tourist cities with passenger indexes (number of passengers enplaned per 1000 population) in excess of 1000 were excluded. The results do not suggest significantly better generative powers for the specialists. Thus, for 51 cities under 10,000 population served exclusively by a local service carrier, the median passenger index was 215; for 25 cities of similar size served exclusively by trunk lines, the median index was 121. The average passengers per plane departure were 1.0 and 1.9, respectively. For all cities under 25,000 population, local service carriers had a median passenger index of 111 for 106 cities and trunk carriers 117 for 65 cities. Other measures for this larger group showed, respectively for local and trunk carriers; average passengers per departure of 1.14 and 2.18, mail tons per 1000 population of 0.44 and 0.39, and cargo (including express) tons per 1000 population of 0.33 and 0.56.

sponse of residents of small communities to high quality air commuter service with their trade centers, at a fraction of the full social cost of such service, proves only that consumers still know a bargain when they see one. When consumers have enjoyed a so-called public service, it is commonplace that they do not happily forego it, even when it was not supported by the public treasury as in the case of railroad service. The problem then, is not the abandonment of air service at all points which cannot now bear the full cost thereof. Since the justification for such service rests on political and social considerations, the question becomes how such service can be provided at minimum social cost.[26]

A Possible Solution

The discussion thus far has attempted to show that certain policies of the Board were more appropriate for the promotional stage of domestic air transportation than for the self-sufficiency stage on which we are now embarked. The use of direct competition as a device for the regulation of rates and services can be relied upon less when the federal funds for easing the temporary or permanent pains of competitive excesses are strictly limited. Similarly, the specialist doctrine, by which local service carriers have been made different and kept different for the purpose of maximum concentration of effort on a minimum-sized market, must be reappraised. And the revision or abandonment of these policies must be carried out against the background of the broad problem of the entire industry — the financial stability of every one of its members.

There are a number of steps which can be taken by the Board, which follow somewhat different paths, but which all move in the direction of industry-wide self-sufficiency. The decision to attempt to correct disparities in the earning power of trunk-line carriers by a policy of mergers of the weak with the strong has received wide support. It may be that a somewhat similar move with respect to the local service carriers would likewise find acceptance, when the special problems involved have been explored and the special techniques required have been worked out. The remainder of this paper will be devoted to some of the questions which would arise if such a policy were adopted.

The Johnson Proposal

In April, 1953, Senator Johnson suggested to the Board a possible use for the profits of the larger trunk-line carriers, if the General

[26] It is important to observe that a criticism of the local service experiment and of the specialist doctrine does not imply a criticism of the local service industry or of the individual firms of which it consists. The Board on many occasions has commended individual firms, and the industry's record of innovation in the technology of air transportation has been widely publicized. (See, for a discussion of the many achievements, Josh Lee, "The Planned Promotion of Feeder Air Transportation." 17 JRL. OF AIR LAW & COM., 356-60.) Public recognition and approval of the efforts of these firms means they have substantial good will and going concern values; this fact argues against any solution to the local service problem which would destroy these values.

Passenger Investigation then underway showed such profits to be excessive:

> "Instead of looking toward a reduction in the rates of these large carriers, it would be far more sensible for the Board to compel such carriers to utilize these profits by assuming the operation obligations of the local-service lines and smaller trunk lines that now require subsidy. The big railroads are compelled by the regulatory bodies to operate branch line passenger service at a terrific loss. Instead of reducing the rates of the strong air carriers, the strong air carriers should be required to take the bitter with the sweet, as have the railroads."[27]

The phrase, "taking the bitter with the sweet" refers to a concept better developed in the public utility regulation of other-than-transport companies, where it is often referred to as "taking the lean with the fat." Generally, the concept embraces two ideas, only one of which has thus far had any use in air transport regulation. In the first place, the phrase refers to the fact that, for a multi-product, multi-market firm, there is no reason to expect uniform rates of profit for all the firm's products or in all its markets. This idea has been expressed by the Board as applying to air transportation when, in the *Transcontinental Coach-type Service Case,* it said:

> "Our national air transportation system must of necessity provide service at cities showing varying degrees of attractiveness from a traffic-generating standpoint and individual route segments must include some points that are below the optimum in profitability. These variations exist not only in the system as a whole, but in the system of each individual carrier."[28]

And in the same decision, the Board referred to ". . . the traditional public service obligation of serving communities which can only be served at a loss."[29] Such a reference to the public utility obligation for air transportation would seem to refer to the abandonment of an existing service simply on the showing that that service provides less profit than other services, or incurs a loss. In the second meaning, the concept may refer, in "local" utility regulation, to the way in which the firm expands within the market area in which it "holds itself out to serve." Thus, in the process of introducing service to new sections of the territory (a territory which has been delineated by the firm's actions in offering service as well as by the terms of franchises) the

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[27] Senator Edwin C. Johnson, "Utilizing Trunk-Line Profits to Support Local Air Service," Letter to the Chairman of the Civil Aeronautics Board, reprinted in 20 JRL. OF AIR LAW & COM. 203, 204. The analogy to main- and branch-line railroad service is similar to an analogy used by Board Member Young in the *Southeastern States Case,* 7 C.A.B. 863, 911-12 (1947) where he advocated the broadening of the feeder experiment to include trunk line carriers. There, he argued that in the electric industry, ". . . the regulatory agencies have not assumed that the public interest would be served by licensing one power company to serve consumers at distant points and another to serve those nearby, thus segregating the high- and low-cost services." In air transportation, the analogy means that ". . . the operating entities . . . should be so constituted as to provide, to the fullest extent practicable, a balanced volume combination of the low-cost, high-value services on the one hand and the high-cost, low value services on the other."

[28] Order Serial No. E-5840, decided Nov. 7, 1951, p. 7.

[29] *Ibid.,* p. 5.

firm is not free to select areas solely according to the test of immediate profitability.[30] Since the certificates of convenience and necessity in air transportation define the carrier's service obligation by reference to points, and not areas, this second meaning of the phrase "taking the lean with the fat" does not apply in our present regulation of air transportation.[31] However, since Senator Johnson was referring to the expansion of trunk line operations into the "bitter" or the "lean," it would seem that his proposal bears a relationship to this second meaning.

No method was described for carrying out the proposal that the large trunk lines assume the operation obligations of the weaker lines. Conceivably, there could be gradual transfer of points presently served by the local service carriers to the trunk lines carriers; such a policy would be related to that of the Board in recent years when it has transferred feeder-type points from trunk line routes to local service routes in an attempt to strengthen the latter. It would be possible to transfer the poorer local service points from local service carriers to trunk lines, thus improving the earnings of the former and at the same time utilizing the excess profits of the latter. But for such a policy to do substantial good, it would probably have to be carried to such lengths that the local service carriers would emerge as small regional trunk lines with new duplicative route patterns, while the trunk lines would be performing, in addition to their present services, those services now being rendered by the local service industry.[32]

Preferable methods for implementing the Johnson proposal would be the transfer of route segments or entire route systems, or the mergers of the weaker companies into the strong. How might such actions be taken, so that the losses on the federal investment in the promotion of local air service would be minimized at the same time that the greatest possible progress toward total industry self-sufficiency was being made? One possible program which the Board might adopt is sketched below, in very broad lines.

A Merger Program for the Local Service Carriers

Basic to the program for narrowing the disparities in earning power would be the adoption of a merger program, by the statement that the Board would view favorably certain kinds of mergers made under

[30] For example, the following is a typical statement: "Corporations which devote their property to a public use may not pick and choose, serving only the portions of the territory covered by their franchises, which it is presently profitable for them to serve, and restricting the development of the remaining portions. . . ." *People ex rel. New York & Queens Gas Co. v. McCall*, 245 U.S. 345, 351 (1917).

[31] In the *Air Freight Case, supra*, Slick and Flying Tiger requested certificates worded in terms of geographic areas rather than points. The Board, however, after stating it was not deciding whether the Act gave it the power to award area certificates which omitted any mention of specific points, named groups of specific points. It appears that the difference in practice between the two types of certificates need not be great.

[32] Such does not seem to have been Senator Johnson's intent, for he did not state that the trunk lines should assume only *some* of the operating obligations of the weaker carriers.

specified assurances and restrictions.[33] The mergers ought to be between a trunk line and one or more local service carriers with whom that trunk line has some substantial service areas in common; perhaps the trunk-line's choice should be limited to the local service carrier or carriers with whom it competes in the largest number of (or most important) city-pair markets. While the existing temporary certificate for the local service route might be made permanent, the existing minimum flight-frequency requirements should be retained for a further experimental period, except insofar as their purpose was to limit the competitive impact of the local carrier on the trunk line. It might be expected that the mechanics of a merger would transfer the fleet and much of the personnel of the local service carrier to an operating department of the trunk line. However, the local system should be retained as a separate rate-making unit for mail pay purposes, with separate accounts and reporting requirements, as was used in the transfer of a local route to Mid-Continent in 1950.[34] Subsidy would, of course, be required for an initial period, but the amount could be expected to be reduced almost immediately for a number of reasons; the economies available from the merging of duplicate plants and operations, the economies from elimination of operating restrictions on the local service system intended to prevent excessive competition with the trunk line, and increases in revenue from system traffic growth and from the higher local service fare levels made possible by the reduction of competitive city-pairs.[35]

After an initial period of operation with continued but substantially reduced federal subsidy, and as excess earnings developed for the trunk line, consideration should be given to the transition from externally-supplied subsidy to internal or intra-firm subsidization. Perhaps for an interim period, an earnings offset system would be desirable whereby some portion of the excess earnings on the trunk line routes, when there were such, would be used to offset the subsidy on the local service route. Ultimately, the use of separate rate-making units should be abandoned and the distinction between the two parts of the firm's system would disappear in accounts and reporting.

It is perhaps worth noting again that under this proposal, the restrictions hitherto imposed on the local service carriers, and which were the cause of operating diseconomies, could in large part be relaxed. In addition, what has in effect become an obligation on the local service carrier to operate with pre-war equipment would disap-

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[33] This discussion will exclude the smaller trunk lines who are also in the category of weak carriers, and whose problems would not be solved by a merger with a local service carrier but probably rather by a merger with a large trunk line.

[34] *Parks Investigation Case*, Order Serial No. E-4472, decided July 28, 1950.

[35] Board action to maintain higher fare levels on local service routes is indicated by the following statement: "We shall also look with disfavor on any action of Mid-Continent whereby it would attempt to equalize its fares for such circuitous services with the fares for the direct services of the existing carriers, or to resort to any other device for providing competition which we do not intend either to authorize or permit." *Parks Investigation Case, supra*, p. 24.

pear.[36] Some small cities would very likely receive service with newer equipment. It is also possible that that most unfortunate obstacle in the local service experiment, the lack of an economical local service plane, would be overcome; certainly, the stronger resources and permanent certificates of the trunk lines would lead the manufacturers to examine again the market for the successor to the DC-3.

A New Policy Statement of the Dimensions of Promotion

An essential part of any program for the future development of air transportation, and a second part of the program for reducing disparities in earning power, would be a statement of policy by the Board as to the direction of future growth. The decision of the Board in dismissing *The General Passenger Fare Investigation* contains some parts of that kind of a program. The Board's comments there on the need for measuring profits over a long period, and of the desirability, in the regulation of profits, of providing an economic climate conducive to managerial risk-taking manifests a more advanced view of regulatory responsibilities than many utility commissions are capable of, and promises a strong future for the air transport industry.

In this decision, the Board recognized, and offered encouragement to, one dimension of growth – the expansion of coach-type service – in favor of growth in another dimension – a first-class passenger rate reduction. Profits could be used in either direction: to reduce prices of one service or to expand the scope of another type of service in those markets where it has been considered marginal. Losses, of course, might give rise to the opposite actions.

There are a number of other possible uses for profits (or losses): a reduction (or increase) in all rates, the introduction of new equipment (or the retardation of its introduction), the expansion (or contraction) in the intensive scope of service as by increased schedule frequency, and the expansion (or contraction) in the extensive scope of service as in the introduction of service to new cities or in new city-pairs. It cannot be assumed that each of these methods of plowing excess earnings back into the business would serve the nation's air transport needs equally well in all instances, nor that they would be equally useful ways of absorbing the excess earning power of any one firm when that firm's principal competitors lack such earnings. There is no assurance that, in the absence of the restraint of the Board's hand or voice, a carrier might not choose to spend excessive earnings exclusively on those competitive weapons for altering existing shares in a market – overscheduling and equipment innovation, at greater public cost than public gain. It would seem then that the Board will have in the future the responsibility of indicating desirable directions of growth and rates of growth, just as it has done in its recent encouragement of coach service. Under a regime where the service to the marginal small-city, short-haul markets in a region is the exclusive

[36] See *Pioneer Air Lines, Inc., Mail Rate, supra.*

responsibility of one unsubsidized firm with only a limited incentive to expand into more of the same thinness, the Board must, it seems, announce a doctrine of "taking the lean with the fat" — that in exchange for control over this market, the firm has some responsibilities for developing it.

It may be that this type of program would satisfy the many conflicting interests involved in the local service problem. It provides for a continuation of local air service at its present extensive and intensive level, and attempts to assure the future expansion of such service at an economic rate.[37] The communities involved can have no objections if such aims are achieved, and the issue is thus kept out of the political arena where local interests often emerge above the national interest. The national transportation policy of Congress will be furthered and the Administration's aim of economy will also be served. The trunk-line carriers know that their status as a regulated industry gives them certain protections and also imposes upon them certain responsibilities. From the past record, there is no reason to expect trunk-line managements to argue: a) their legal right to more than a reasonable return on the investment plus limited rewards for managerial efficiency and incentives for future risk-taking, or, b) their freedom from responsibility for the development of a great national asset and a highly essential service.[38]

Air transport in the United States has arrived at the point of transition from heavily promoted childhood, under the logic of support for an "infant industry," to self-sufficient maturity. It may be that the present form of the Act poses some obstacles to the transition; if so, alteration is certainly possible in the present environment. More important, it would seem, is a recognition by the regulators and the industry of the new meaning of *promotion* for a self-sufficient industry — the creation of an environment conducive to the largest balanced growth which is economically justifiable to the investors whose confident support is essential.

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[37] It has recently been argued (Leslie O. Barnes, *op. cit.* pp. 198-99) that the proposal that trunk-line carriers be required to provide local air services "makes absolutely no sense for a number of unassailable reasons." The reasons offered are: 1) that the trunk lines could render identical service to that now being offered by local service carriers only at greatly increased costs and larger subsidy. Such an assertion, without proof or even indication as to why a result would occur which is contrary to all that might be expected, cannot be dealt with; 2) that the trunk lines have offered only "token service" to small cities and can neither be expected to change or forced to change by the Board. A comparison between the two types of carriers is meaningless here, for a few small cities on a long route do not make a local route pattern. In this instance, a synonymous phrase for "token service" may be "economically justifiable service." And the Board would not agree to the suggestion of its impotence, as shown above; 3) the statement quoted above in note 21, that the local service operation is distinctly different and hence requires a specialist, an assertion that has already been discussed.

[38] Air transport lies in that group of businesses to which resort to nationalization has been easily and frequently made. In this connection, Sir Leonard Isitt in "Air Transport in New Zealand and the South Pacific," Journal of the Royal Aeronautical Society, Nov., 1951, observes that a case for nationalization can be made on five grounds, of which two are, ". . . cut-throat competition is eliminated . . ." and ". . . it becomes more practicable to use profits on main lines to absorb losses on lateral routes." p. 709.

REASONABLE OPERATING RATIO VERSUS FAIR RATE OF RETURN

By William L. Grossman

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A GREAT deal of rate regulation is based on a determination of the amount of revenue that a carrier ought to earn or that a given service ought to produce. It is, in essence, revenue regulation, and may be described as rate regulation only superficially, because rates are fixed or permitted at a level that will produce the amount of revenue considered adequate. In the case of airlines, this is notably true in the determination of mail compensation, which is fixed at a level that will produce the amount of revenue considered appropriate for the mail service. It is true also of mail payment that includes an element of subsidy, for the rate of such payment is intended to bring total revenue to an adequate level.

In the future, the problem of adequate-revenue determination may arise with increasing frequency in connection with commercial services and with the entire operation of even a nonsubsidized airline or group of airlines. Although, in the opinion of the present writer, the CAB ought to be reluctant, for at least several years to come, to place ceilings on air carrier rates for commercial services, the possibility that the Board will think otherwise cannot be dismissed. And in any event the problem will persist in connection with mail payments. Accordingly, Captain Rickenbacker's proposal[1] that reasonable operating ratio be used as a revenue yardstick and that the fair-rate-of-return method be discarded, requires careful appraisal.

Operating Ratio and Profit

First of all, Captain Rickenbacker's proposal requires definition; for, in spite of the terms in which he presented it, he has not proposed a method of measuring the adequacy of airline profits. Indeed, profit does not enter into the concept or calculation of operating ratio. For carrier rate-making purposes, this ratio is simply the percent of operating revenue represented by operating expense.[2] As explained by the Interstate Commerce Commission in connection with motor-carrier rate regulation, the expense used in determining the ratio "includes depreciation charges, operating rents, and taxes assignable to motor-

[1] Captain Eddie Rickenbacker, "The Operating Ratio as a Yardstick for Measuring Airline Profits," 20 Journal of Air Law & Commerce 253 (1953).

[2] In public-utility economic analysis, operating expense less depreciation, or operating expense (including depreciation) plus taxes, is used as the dividend in the operating ratio; in the latter case the ratio is sometimes called "all-expense operating ratio." The divisor, however, is always operating revenue.

carrier operations, such as gasoline taxes, social security taxes, registration fees, and similar items." The Commission goes on to state that it does not include "interest on debt, . . . or income or excess-profits taxes, State or Federal."[3]

It will be noted that profit does enter into the picture. Nor can profit be derived by use of the factors (without additional information) involved in the ratio. The remainder that can be derived from these factors, i.e., revenue less expense, is not profit; it is, roughly, the amount available for interest, income taxes, and profit.

To say that an operating ratio is too high or too low is to say that revenue is inadequate or unnecessarily large in proportion to expense. The usual implication is that rates ought to be increased in the former case and decreased in the latter. Profit will of course be affected, but the operating ratio is in no respect a yardstick of profit. Indeed, strictly speaking, it is not even a yardstick of return to investors; for return (i.e., interest plus profit) is not among the factors used and cannot be derived from them. Even if operating ratio did indicate the return to investors, it would not indicate the ratio of return to the number of dollars by which they, as investors, measure its adequacy, i.e., the investment on which they are seeking to earn a return. This ratio, of course, is the "rate of return," which, by the orthodox concept of airline rate regulation, is to be kept at a fair and reasonable level.

Significance of Operating Ratio

Accordingly, operating ratio, unlike rate of return, does not show whether investors are earning too much or too little. What it does indicate, or help to indicate, is the answer to this question: Does revenue exceed expense by a proportion sufficiently high to minimize the possibility that the excess will be eliminated by an adverse change in the amount of expense or revenue? Captain Rickenbacker points out, and properly, that a high operating ratio creates danger of such elimination. Therefore the operating ratio should be kept reasonably low even if an incidental effect is to give investors an unreasonably high, more-than-fair rate of return on their investment.

This can be made clear if we assume that, in a given case, rates just high enough to produce revenue sufficient to keep the operating ratio reasonably low would necessarily produce a rate of return higher than otherwise necessary to attract capital. (The cost of capital is commonly considered the principal criterion of fair rate of return.) For example, let us suppose that an operating ratio of 93% is found to be the highest safe ratio; that rates are fixed or permitted at a level that will realize this ratio; that 8% is a sufficiently high rate of return on investment to attract capital; and that the rates fixed to realize an operating ratio of 93% will produce a rate of return of 10%. Although the revenue is higher than necessary to maintain the carrier's ability to attract capital, one may argue that it should not be reduced; for, if it were reduced,

[3] *Increased Common Carrier Truck Rates in the East*, 42 M.C.C. 683, 647 (1943).

the operating ratio would be above 93% and would therefore be too high. The possible consequences of an excessively high operating ratio are consequences associated with the danger of an operating loss, especially pressure on an airline to discontinue some of its services or to skimp on quality of service. These are obviously inconsistent with the policy and purposes of the Civil Aeronautics Act.[4]

Consistent adherence by the CAB to the policy of keeping airlines' operating ratios reasonably low might tend somewhat to reduce the prospective rate of return that investors would demand of airlines. Nevertheless, regulation of rate level through the operating ratio would not necessarily be directed primarily to maintenance of an airline's ability to attract capital. It is quite possible, indeed, that an operating ratio sufficiently low to minimize the possibility of loss, but no lower, would involve revenue insufficient to produce a return on investment at a rate attractive to suppliers of capital. In such a case, one of the purposes of government regulation — to maintain the investment status of common carriers and thus to facilitate desirable expansion and equipment purchases — would be thwarted. Therefore the customary fair-rate-of-return method of fixing rate level would have to be relied upon. By this method, as we have intimated, rates are fixed at a level that will produce a percent of return on investment sufficiently high to permit the airlines to compete favorably with other buyers of capital.

In short, revenue must be high enough (1) to lead to safe and adequate service and (2) to maintain the carrier's ability to attract capital when necessary. The two are not wholly independent of each other, but they are nevertheless distinct. Use of operating ratio as a revenue yardstick tends to assure attainment of the former goal, and use of the fair-rate-of-return standard tends to assure attainment of the latter goal.

Captain Rickenbacker justifies the use of operating ratio partly on the ground that rates of return "traditional in the public-utility field" might result in "a dangerously narrow margin of safety."[5] The premise is true, but it is not a good reason for wholly abandoning fair rate of return. This rate of return, if really fair to the airline industry, would be based on the cost of capital not to public utilities but to industries of economic characteristics similar to those of the airline industry. In any event, there is no need to rely exclusively on fair rate of return. The basic error lies in the assumption that use of reasonable operating ratio and use of fair rate of return are mutually exclusive alternatives.

Analogy to Surface Transportation

So far as either the fair-rate-of-return or the reasonable-operating-ratio method can be said to be used in railroad rate regulation, it is the former that is used. This is primarily because the relative contri-

[4] Civil Aeronautics Act, section 2.
[5] *Op. cit.*, at p. 261.

bution of capital to the production of railroad service is extremely large. In that industry, net investment approximates two-and-a-half times the amount of annual revenue. Thus, at a rate of return of 6% the return would account for about 15 cents of the revenue dollar. Because of the indicated quantitative importance of capital to the production of railroad service and revenue, a prime concern in railroad regulation has naturally been to fix rates high enough to satisfy the demands of suppliers of capital.

Furthermore, even a modest rate of return on investment will provide an operating ratio far below the danger point, so that rate of return and the attraction of capital become the critical elements; if the criterion that they represent is satisfied, the problem of reasonably low operating ratio is automatically taken care of. For example, in the case of a 6% rate of return, an operating ratio far below 85% will be achieved. In brief, emphasis on or even exclusive use of the fair-rate-of-return method is justified by the highly capitalistic nature of railroads and by the consequent fact that this method will assure a reasonably low operating ratio and will thus attain the objectives of the reasonable-operating-ratio method without actual use of this method.

In the case of motor carriers. the economic facts are exactly the contrary, and the Interstate Commerce Commission has therefore adopted the reasonable-operating-ratio method in regulating the rates of this industry. Capital plays a relatively small part in the production of motor-carrier service and revenue. The ratio of net investment to annual revenue often runs as low as one to four. Therefore a rate of return as high as 10% might result in a return of 2.5 cents per revenue dollar and (very likely) an operating ratio of about 95%. Accordingly, neither of the two reasons for use of the fair-rate-of-return method in the railroad industry applies to the motor-carrier industry; for in the latter the investment plays a relatively minor role, and a fair rate of return on investment might result in a dangerously high operating ratio. At the same time, a reasonably low operating ratio — the Interstate Commerce Commission generally thinks in terms of 93% — would rarely result in a seriously inadequate return on capital; for, out of the 7 cents per dollar of revenue available for taxes and return on investment, enough must be left after taxes to pay a return on an investment of only about 25 cents. Assuming that half of the 7 cents goes to taxes, enough will remain to provide a rate of return of 14%. It follows that rate regulation of motor carriers based exclusively on operating ratio will almost inevitably satisfy also the requirements of the fair-rate-of-return criterion.

With respect to the relationship of net investment to revenue, and therefore with respect to the operating ratio that is likely to result from a given rate of return, airlines occupy an intermediate position, although this position is considerably closer to that of motor carriers than to the position of railroads. Net airline investment, for various airlines at various times, has run close to one-half of annual revenue.

Assuming that income taxes account for about 50% of the amount otherwise available as return, an airline operating ratio of 93% might result in a rate of return of about 7% – too close to the borderline for full reliance on a reasonable operating ratio as a means of assuring a fair rate of return and reasonable ability to attract additional investment. And, of course, the same is true in reverse; a fair rate of return would offer insufficient assurance of a reasonably low operating ratio.

In short, it is quite possible, in the case of the airlines, that exclusive use of either the operating-ratio method or the fair-rate-of-return method would endanger the achievement of the objectives associated with the other.

CONCLUSION

As effects adverse to the public interest may flow from an excessively high operating ratio, and as somewhat different adverse effects may result from an inadequate rate of return on investment, airline revenue ought to be high enough to satisfy *both* standards, i.e., to satisfy in each case the more exacting of the two standards. Because the use of operating ratio is less costly and less time-consuming, and because airlines are relatively close, economically, to motor carriers (in whose regulation, for reasons above indicated, the operating-ratio method is used), the operating-ratio method may well be adopted as the primary yardstick, subject to correction when there is reason to believe that the minimum revenue required under that standard would result in an inadequate rate of return on investment.

MEASURING THE AIR TERMINAL CONSUMER MARKET

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THE CAA's "National Airport Plan" of 1953 predicts an expenditure of $650,000,000 over a period of three years for new airports and for improvements at existing airports. Agencies at all levels of government, engineers, architects and planners will, in this and in succeeding developmental periods, be grappling with the problem of resolving the many variables and uncertainties inherent in planning air passenger terminals.

Probably the greatest single uncertainty in the planning of air passenger terminals is the problem of finance. Terminals built to meet short run traffic requirements face the risk of overcrowding and early obsolescence. Terminals geared to long range traffic growth must, of necessity, provide operational space in excess of immediate requirements. Such excess space must be put to productive use to cover its own cost, and share the burden of public and utility areas sized to ultimate requirements. The evidence is overwhelming that if revenues from aviation sources alone are called upon to support terminals planned for future requirements, the financial burdens imposed would be very substantial.

Airport operators have looked to consumer markets, usually operated as concessions, as a means towards covering the early deficiency. Many operators have turned to the experience of concessions in rail passenger terminals. Such experience, especially when based on rail terminals built along monumental architectural lines, has not been too useful a guide. Despite the fact that concessions activities in major rail terminals may draw upon massive flows of commuters and regular travelers, as well as pedestrian traffic in the locality, the returns to terminal management have been disappointing. One major rail carrier, whose intensive study and experimentation in a wide variety of concession activities reports only modest gains for the effort, is resigned to a chronic deficit. Another carrier has initiated studies at all of its system terminals, not in the hope of overcoming, but in the expectation of alleviating deficits.

Airport management may also turn to a substantial body of information on airport concessions which has accumulated during the postwar period. The applicability of such data in a given planning situation is, however, subject to some practical limitations. Methods of reporting may vary from airport to airport. Statements on food revenues may or may not include sizable sales from such goods as magazines and novelties vended in the same establishment. The price and

quality of goods, and the standards of management in allocating space exert their influence. There is also the well-founded belief that the composition of the terminal population varies from airport to airport, depending upon such factors as the number of passengers in transit, number of employees in the terminal proper, as well as in adjacent hangar areas, and the degree to which the airport attracts visitors from the locality. Again, such factors as accessibility to the highways may profoundly effect the number of visitors who drive to the airport in meeting or accompanying air passengers. Therefore, when measures of revenue are expressed in terms of revenue per passenger handled, or as gross sales per square foot of space occupied by terminal concessions, the results may be quite misleading. In the New York Metropolitan Area for example, the gross revenues from concessions on a per passenger basis may vary as much as 300% between airports, while the revenue per square foot occupied are approximately equal.

In seeking the answer to the question as to how much financial support might be derived from concession revenues, whether in modifying the existing or planning new terminals, it was apparent that operating data would have to be complemented by accurate information on the spending habits not of the aggregate, but of the individual segments of the terminal population.

Obtaining information *about* the people using the terminal and patronizing the concessions requires obtaining information directly *from* these people. Financial records and turnstile counts cannot distinguish people by their purpose for being in the terminal, nor can passenger data shed light on spending in the terminal.

Sample surveys using personal interviews are widely used as a technique of market research in collecting information from actual and potential customers.[1] The surveys reported here are an application of probability sampling techniques in use in business and government. The Survey Research Center of the University of Michigan served as consultants on the sample design and the measurement of sampling error.

The Terminal Population as a Consumer Market

The "normal" market is a place where people who intend to buy can find and select goods to meet their demands. Their primary purpose in visiting a "normal" market is specifically to shop, and, if induced by the type, price, and quality of goods, and aided by the lubrication of the surroundings and salesmanship, to buy.

People who visit terminals, air terminals in particular, have no such purpose as a rule. Their reason in visiting the terminal is normally to embark on a trip, or to transfer from the airplane to their ground transportation that gets them to their local destination, or to

[1] As an alternative to personal interviews, Mass-Observation, Ltd., an English firm, observes the passage of people through public buildings, sees what path they take, and what they do and buy. This is an expensive procedure as the number of people which each employee can observe is severely limited.

accompany air travellers either to or from the airplane. In addition, there are those who visit the terminal on business, and terminal employees, air crews, and others whose work requires them to enter the terminal, and there are casual visitors who come to see the airplanes and watch the activity in the terminal. But only in very rare instances is "shopping" the purpose of the visit to the terminal.

This fact multiplies the problem of successful merchandising in the terminal. It imposes upon the seller the added problem of changing the fixed purpose and intention of his only prospective customers — of creating a market that didn't exist. Can this be done? If so, to what extend, and by what means?

To see if it can be done successully, it is possible to fall back on market research methods that have been fully developed to measure "normal" markets, and to apply the same principles to the analysis of the "market behavior" of the terminal population, under a variety of conditions, and draw such conclusions as the findings may justify. If these findings are significant, they may, by inference, be applied to predetermine, within broad limits, what market characteristics to expect under similar conditions, either existing or contemplated, in other terminals.

If the purchasing behavior of all segments of terminal populations were relatively stable or uniform, it could be measured adequately in terms of total traffic volume — sales per passenger, for example. The variation of 300% in this measurement at the terminals cited above shows the fallacy of this ratio as a reliable indicator of the market potential in a terminal.

Revenue per square foot measures the area of the shop as well as the market. Although it may be an effective measure of the profitableness of the business, it is no measure of the size or behavior of the market.

Summary of Findings and Conclusions

A summary of some of the tentative, general conclusions suggested by the studies may aid in bringing the details into focus:

1. The several components of a terminal population can be determined and compared by standard market research methods.
2. The market behavior of the several groups of the population classified by purpose of visit and time spent in the terminal differ radically as between groups, but uniformily as between terminals. The largest proportion of spenders is usually found in terminal employee groups, as would be expected. These are followed by "spectators" (casual visitors), outbound and transient passengers, and persons accompanying passengers. Inbound passengers rank last.
3. A large and profitable local neighborhood market for terminal concessions can be developed under conditions, where excellence of quality and light competition exist in a prosperous airport neighborhood.
4. The proportion of spenders in a terminal population group is fairly uniform under basically different market "exposure pat-

terns," but the amount spent by the spenders in each group can be increased by improved "exposure." The amount of such increase is strictly limited, and may not be proportional to the improvement in exposure.

5. Sixty percent or more of expenditures are for food and drink. This is generally true for almost every population group studied, under all three "exposure" patterns. This finding is uniform, seems to be unaffected by the relative attractiveness or availability of other goods and services, or their "exposure." (Owing to limitations of space, tabular data are not presented for individual commodities or commodity groups.)
6. Expenditures for food and drink are roughly proportional to time spent in terminal (as would be expected), but expenditures for other goods and services are not materially increased by longer time in terminal.
7. The consumer market that can be created from an air terminal population is severely limited. People who are willing to spend *some* money may be induced to spend somewhat *more*, under favorable conditions. But the proportion of spenders in the group will not be materially increased by inducements of variety or quality of goods or improved "exposure patterns."

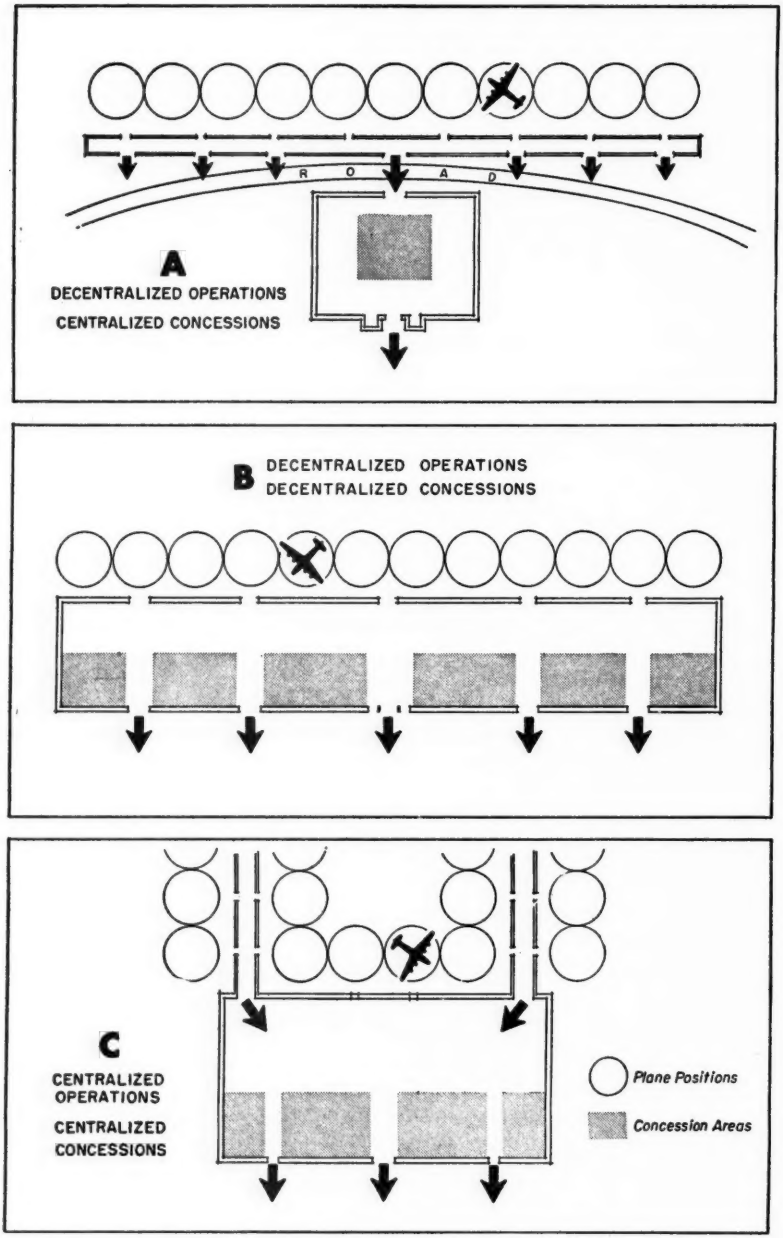
Exposure Patterns of Centralized Air Terminals

Centralized air passenger terminals generally fall within one of three broad classifications with respect to their market exposure pattern. These types differ materially with respect to the coordination of passenger handling operations and consumer service shops and facilities. These differentials in layout with respect to traffic flow result in fairly sharp contrasts in the degree of exposure of the potential consumer market to terminal concessions (see Figure 1). Differences in the buying behavior of the terminal population under these three contrasting exposure patterns provide useful measurements of the effect on consumer habits of concession exposure under different terminal exposure patterns and provide hypotheses for reasonable estimates of the purchasing characteristics that might be expected from specific population groups under various traffic flow types of terminal design.

Figure 1 identifies three general types of terminal layout that result in marked differences in exposure patterns.

Exposure Pattern A. This layout is characterized by two distinct terminal areas, the terminal building proper and the long arcade structure between the terminal apron and the entrance road. Although the generalized schematic outline in Figure 1 indicates a specific geographical relationship between these two area, this pattern typifies such distinct architectural treatments as the new terminal at Pittsburgh, the Boston terminal at Logan Airport, and La Guardia Airport in New York. Under this pattern of exposure, the central building or area houses all the major concessions but the arcade structure is accessible directly to passenger vehicles, thereby permitting a large proportion of the terminal population direct through access between the road and the airplane.

FIGURE 1 – TYPICAL AIR PASSENGER TERMINAL EXPOSURE PATTERNS



Usually check-in counters, baggage claim areas, and a small unit waiting room are provided in the arcade for each carrier, which, in effect, results in a decentralized unit type individual terminal for each airline. Persons arriving by coach are dropped at the arcade entrance adjacent to the plane position from which they will depart while those leaving the airport by coach will board it at the arcade exit nearest the gate position of their arrival. Thus, a major proportion of passengers is not exposed to any concessions except vending machines, and time does not ordinarily permit them to visit the central terminal area even should they so desire. Those who come to or leave the airport by private automobile may walk through the central building if they wish, but many will avoid this unnecessary detour. Airport visitors who accompany outbound passengers or meet plane arrivals will follow the most convenient pattern between the parking area and the gate position, but ordinarily will spend any waiting time in the airline waiting room in the arcade building.

Exposure Pattern B. This layout is characterized by a relatively decentralized and non-functional terminal building stretching the length of the apron between the apron and the entrance roadway. This type of building is similar to the arcade structure in Pattern A, but, by providing a much deeper area throughout its length, it permits the scattering of concessions throughout its full length, thereby exposing all of the terminal population to some of the concessions, and making all concessions readily accessible, but not visible to everyone passing through the terminal. The traffic flow of inbound passengers may be centralized by the use of centralized baggage claim area or areas, which increases the concession exposure to this element of the market. Visitors and outbound passengers will ordinarily pass by a substantial number of concessions between the entrance door and the passenger gate. This pattern of exposure is generally unplanned, and makes use of temporary structures or enlargements of terminal facilities that have been added to increase the capacity of small terminal buildings that have been outgrown by the rapid growth of traffic, as in the case of Dallas (Love) Airport, the old Boston Airport, and New York International Airport.

Exposure Pattern C. Most modern terminals are laid out according to this functional pattern which funnels all airport users through a large central concourse which houses both operational and concession areas within a single main rotunda. Under this pattern of exposure, all concessions are in clear view and readily accessible by all components of the terminal market and, consequently, it has been assumed that this type of terminal design will generate the full market potential of the population. Cincinnati, Willow Run, Newark and Washington Airports come to mind as illustrations of this exposure pattern.

International Terminals

The functional peculiarities of Federal Inspection areas for terminating international passengers does not materially affect the terminal

market, since such passengers characteristically move directly from the Customs area to their ground transportation, without detour or delay in the concession area of the terminal. Airport visitors meeting inbound overseas passengers follow the same path as similar visitors meeting domestic passengers, and outbound overseas passengers are generally handled through facilities that from a market standpoint are identical to the facilities provided for outbound domestic passengers.

Market Characteristics of the Population

As already pointed out, the terminal population is very different from a "normal" consumer market. As respects the purpose, intention, and length of exposure to consumer stores and facilities, what potential market exists in the population must be created out of a wholly different set of conditions than those encountered in ordinary retail business. This fact is generally recognized by the heavy emphasis on goods and articles that characterize "impulse buying" and is illustrated by the questionable success of most attempts to sell clothing, radios, or similar goods that generally are associated with more careful and thoughtful shopping.

The purpose of measuring the market that can be created from the various groups of the population, under the several types of exposure, as related to the various kinds of commodities and services, was reduced to a simple questionnaire that required only two or three minutes for completion by a trained interviewer. This questionnaire, reproduced in facsimile as Figure 2, and the procedures followed, were designed to provide answers to the following basic questions concerning the market behavior of the terminal population under extreme differences in physical exposure patterns:

1. How many people make up the terminal market?
2. Who are they? The most important identification is the purpose of their visit to the terminal, supplemented by information on place of residence, sex and age.
3. What do they buy?
4. How much do they spend?
5. How long are they in the Terminal Building?

Conduct of the Survey

The sampling was done in three stages: a sample was chosen of working shifts for interviewers; random exits were assigned to random interviewing periods within those shifts; selection was made of adults leaving the terminal building, through these exits, at these times, in proportion to the estimated distribution of the terminal population.

The interviewing was done by employees who had been given careful instruction in the objectives and techniques of the survey and in effective interviewing methods. The interviewers worked in pairs. One designated the respondents according to a prescribed procedure, so that there was no freedom of choice, while the other conducted the interview as the person left the terminal building. The respondent

FIGURE 2 – **FACSIMILE OF SURVEY QUESTIONNAIRE**

Refusal ____
Out of Population ____

AIR TERMINAL
CONSUMER MARKET SURVEY

Date _____

1. Why did you come to the airport today? Are you returning from an air trip, or did you come to meet someone, or what?

AIR PASSENGER
Coach ____
Regular ____
Air Crew Member ____
Sightseer ____

VISITOR
With Incoming P. ____
With Outgoing P. ____
EMPLOYEE
Terminal ____
Other ____

Other _____

2. Is this a business or a personal trip?

Business _____ Personal _____ Both _____

Other _____

3. Will you tell me as nearly as you can remember the exact time you entered the terminal? _____

4. By what means of transportation will you leave the airport?

Car ___ Carey Coach ___ Public Bus ___ Other _____

For Cars: Parking Lot ___ Meter ___ Other _____

Actual Size of Card
4" x 6"

FRONT OF CARD

5. We are interested in people's spending habits. Did you, yourself, spend any money at all while you were here in the terminal?

*Observation Deck	____	*Cigarettes	____
Lunch	____	*Newspapers & Magazines	____
Dinner	____	Books	____
Coffee	____	*Telephone	____
Drinks (alcohol)	____	*Insurance	____
_____	____	_____	____
_____	____	_____	____

BACK OF CARD

6. Were you on the observation deck? Yes ___ No ___

7. Where do you live? _____

Sex: Male ____ Female ____

Age: 12–25 ____ 25–45 ____ Over 45 ____

Time interview finished _____ AM
_____ PM

Exit: East ____ Main ____ West ____

Interviewer's Initials _____

either waited at the exit while he was being interviewed, or was accompanied by the interviewer, who asked the questions while they walked toward the plane, bus, taxi, or parking lot. As the interview generally took no more than a couple of minutes, the respondent was delayed only very little and, almost without exception, cooperated fully with the interviewer.

La Guardia and New York International Airports, which are of types A and B, were surveyed during the period March 13th through April 30th, 1953. The new terminal at Newark Airport, type C, was surveyed from December 1 to 21, 1953. About 2,000 interviews were conducted at each airport, to provide a sufficiently large sample to assure reliability of results in measuring small component segments of the population.

Validity of the Results of the Survey

The path of information from the activity of the person in the terminal to this article is a long one, and errors can enter at many points. The respondent himself may give erroneous or incomplete information, the interviewer can record the answer incorrectly, clerical errors can be made in tabulation. As the data are obtained from a sample, the accuracy of the results require that the sample be representative of all persons in the terminal. The representativeness is maximized through the use of a probability sample, for which the sampling error can be ascertained. Due to sampling error alone, it can be said, for example, that the true proportion of all outgoing air passengers at New York International who spend money, reported in the sample survey as 53%, is between 47% and 60%. This statement itself has a probability of 95 out of 100 of being correct.

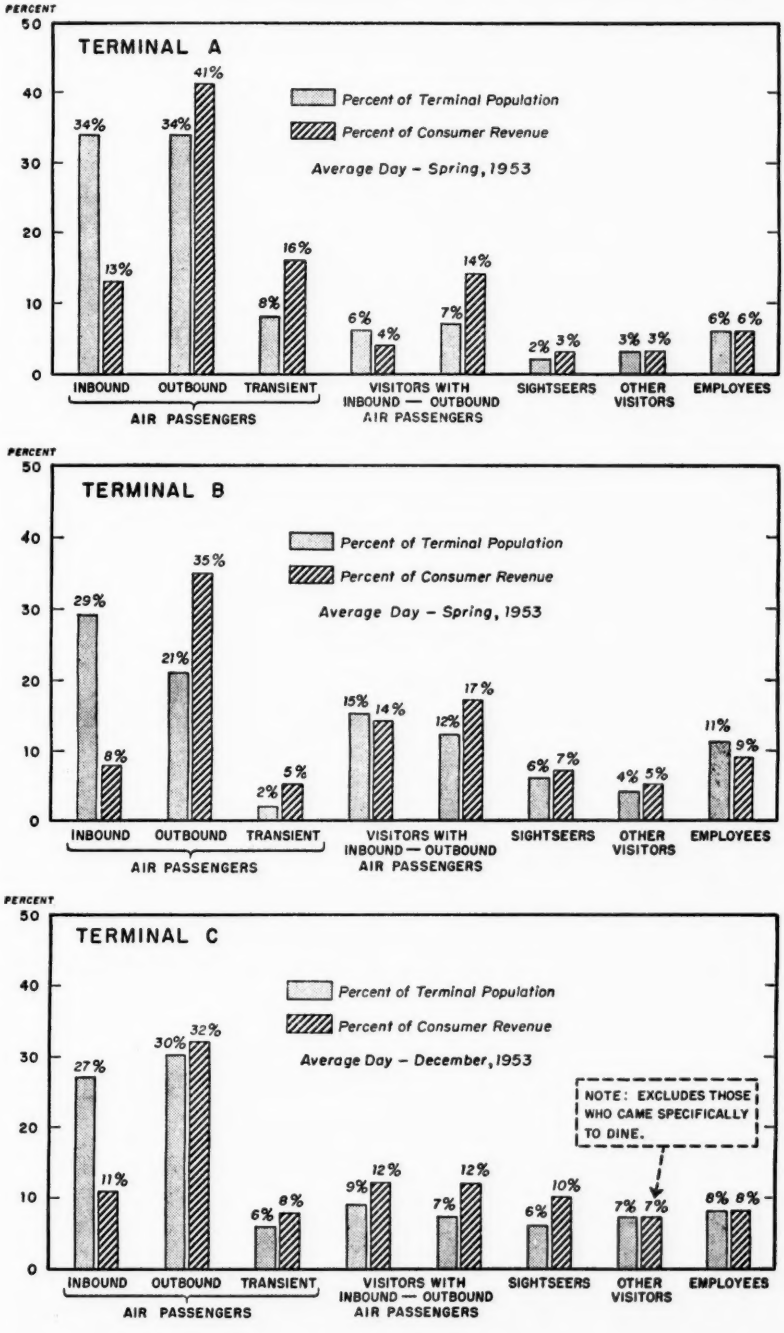
Although the probability sampling method identifies the respondents from among all people exiting from the terminal, this plan is unavoidably modified to some extent by the refusal or inability of some designees to respond, and the interviewer's physical inability during busy hours to approach some of the persons the sample designated.

Employees are known to be under-represented in the sample, probably because of their frequent use of exits other than the public gates at which interviewers were stationed.

Composition of the Terminal Population

The terminal population is defined as the aggregate of all people who actually enter and leave the terminal building. The composition of the terminal populations on average days is shown in Table 1 and in Figure 3. It will be noted that each of the airports surveyed has a distinctive distribution of population as among the several groups. Air passengers account for 76% of the population at La Guardia, 52% at New York International, and 58% at Newark Airport. The greatest variation was in the proportions of the population comprising visitors with air passengers. New York International has about twice the vol-

FIGURE 3 – POPULATION COMPONENTS OF THE CONSUMER MARKET



ume of visitors with air passengers as at the other terminals. In addition, a unique element in the population exists at Newark. These are the visitors from the local neighborhood who come to that terminal for the specific purpose of dining. At the other airports, this type of visitor was negligible in number.

New York International and Newark have about the same percentage of sightseers. In the case of the former, the attraction for sightseers is primarily the interest inherent in the overseas operation. In the other case, the novelty of a new terminal, as well as the fact that the observation deck is enclosed, seem to offer equal attraction.

The titles of most of the population groups in the tables are self-explanatory. However, some of them require definition. Transient air passengers are people who left the terminal by plane, and who arrived at the terminal by either the same or a different plane. They were classified as domestic or overseas transients according to their destinations.

"Other Visitors" includes "Diners" — those who came to the airport specifically to patronize the restaurant. This is a special category of visitors at Newark only. This class of patron was so infrequent at the other airports that it was not tabulated separately. Although "Diners" came to Newark primarily to eat, some of them bought other things also. "Other visitors" also includes those who came for airline information, to patronize other concessions, to visit employees, and on airport and airline business. These other people, of course, dined at the terminal, although they came primarily for some other purpose.

Table 1 shows the distribution of the population by purpose of visit during an average day of the survey periods, in numbers of persons and in percentages. To permit direct comparison of the three "normal" airport markets, percentages are shown excluding the visitors who came to Newark specifically to eat.

Table 2 reports the percentages of each group of the three populations that made an expenditure in the terminal.

Table 3 gives an index of the average expenditure per spender in each population group. An entry in this table should be read, "Among those who made any purchase, the average amount spent by sightseers at La Guardia Terminal was 70% of the average amount spent by all spenders at all airports."

Table 4 records the average length of visit to the terminal for each population group. This was averaged for all persons in the group, and separately for all persons spending, and for all persons who reported no expenditure.

Figure 3 charts the breakdown of terminal population, and the comparable breakdown of total consumer revenue, by population groups. "Diners" were excluded from the Newark (C) population, and their expenditures were excluded from the revenue totals to provide comparability between the three "normal" markets.

Inbound Air Passengers. Inbound air passengers constitute about 30% of the populations, but only account for about 10% of the sales.

Four out of five of them spend no money at all. The inbound passenger spends only about half the time an average person spends in the terminal.

Small departures from these common values were observed among the airports. Newark (C) and La Guardia (A) inbound passengers are similar both in their share of dollar sales and their time in terminal (about 15 minutes). International's inbound passengers, (B), however, spend a half-hour in the terminal, but account for a smaller share of dollar sales. Although even the non-spender at International remains in the terminal about twice as long as those at the other airports, the proportion spending is not larger.

The proportion of inbound passengers actually patronizing a concession, though little different, was least at La Guardia, and equal at Newark and International for domestic passengers. They spent a little more at La Guardia than at International, but substantially less than the inbound passengers patronizing Newark concessions. The Newark patron spent more primarily because of a greater food expenditure. Passengers arriving at New York International from overseas are infrequent purchasers; 87% make no expenditures.

Outbound Air Passengers. Concession sales are more dependent on the outbound passengers than any other population group except "Diners." They constituted from 21% to 34% of the population during the periods surveyed and accounted for 32% to 41% of gross sales. Half of the outbound passengers spend money in concessions.

The average patron among the outbound passengers at La Guardia (A) spends less than the average, at Newark (C) about the average, but at International (B), he spends a third more than the average of all people at the three airports. The outbound passenger at International spends more in all types of concessions: foods, goods, and services. This does not appear to be a consequence of unique behavior by the overseas passengers since both domestic and overseas passengers at International exhibit a similar pattern of spending.

This observation contradicts the hypothesis often accepted, that terminal design and exposure pattern is the dominating factor in the amount spent by patrons. Apparently there are other factors which influence spending more than terminal design and market exposure.

Outbound passengers at International have more persons accompanying them to the terminal than do those at either of the other two airports. Outbound passengers at International also spend more time in the terminal than outbound air passengers at the other airports.

These observations suggest that a complexity of factors such as the length of time departing passengers will be away, the distance of the trip, and the purpose of the journey, may influence the spending of air passengers. Such factors were not measured in this survey, with the result that no positive inference can be made about their importance.

Transient Air Passengers. Some of the people who arrive at the terminal by plane leave on the same plane, and are in the terminal just a few minutes. Many transient passengers change planes, resulting

in their having, on the average, a longer time in the terminal than either inbound or outbound passengers. Since, for this group, the time available in the terminal is determined solely by their schedule, the causal relationship between time and spending is clear with respect to this group. Transients must stay in the terminal a certain length of time and they may not stay any longer than the interval between flights. They cannot stay longer in order to shop or eat; rather they shop or eat because they must stay longer.

The following table lends considerable support to the idea that the length of stay influences the incidence of spending:

	% of Transient Passengers Spending		
	La Guardia	N. Y. International	Newark
Length of Stay	(A)	(B)	(C)
Less than 45 minutes	26%	26%	54%
Over 45 minutes	87%	77%	96%

The expenditures made by spenders among transient passengers are higher than those of the other passenger groups. At La Guardia and New York International Airports the transient passengers' excess in spending over outbound passengers is due almost entirely to higher expenditures on foods. At Newark, it is a result of increased expenditures on other goods.

Visitors with Inbound Passengers. The three airports differ substantially in the number of visitors who come to the terminals to meet arriving passengers:

La Guardia	18 visitors per 100 inbound passengers
N. Y. International	50 visitors per 100 inbound passengers
Newark	35 visitors per 100 inbound passengers

Data from other sources indicate that the characteristic that brings a higher proportion of visitors to New York International is the longer average length of trip, measured both in distance and duration.

Partly as a result of these differences in numbers of visitors with incoming passengers, the relative contributions of this group to total concession revenue vary from 4% at La Guardia to 14% at New York International. But this range in percentages is due to two other factors as well: a small difference in the fraction that spends; and a large difference in the average amount spent by those who spend.

People waiting for arriving passengers probably spend most of their time in the airline waiting room in the arcade of Type A terminals, at some distance removed from all concessions except vending machines. Many of their counterparts in a Type B layout will be in a position to watch for the arrival and also shop in a few stores. All those in a Type C design are near shops.

These differences in exposure are associated with only modest differences in the proportions who spend, and substantial differences in the amount spent by those who spend:

	Type	Percent Spending	Index of amount spent per spender
La Guardia	(A)	41%	60
N. Y. International	(B)	48%	85
Newark	(C)	50%	119

Evidently, most of those in a Type A layout who want to make a purchase find it possible to do so, despite their remoteness from concessions. But they spend less by comparison with the other exposures. Thus, the greater exposure to concessions, while not producing many more spenders, is associated with much more spending by the people who *do* spend.

As is the case for inbound passengers themselves, food is the predominant object of expenditure of visitors with inbound passengers. But whereas the inbound passengers at La Guardia and New York International spent more for services than they did for goods, the visitors accompanying them spent more for goods than for services, at all airports.

It is to be expected that visitors meeting inbound passengers will spend a considerably greater length of time in the terminal than do the passengers themselves:

	Inbound Passengers	Visitors with Inbound Air Pass'grs.
	(Minutes)	
La Guardia	16	52
N. Y. International	28	86
Newark	13	39

The high figure for N.Y. International visitors is not due to the prevalence of overseas service, as people meeting domestic passengers spend about the same amount of time in the terminal as those meeting overseas passengers.

Type C Terminal is evidently able to move people through the terminal more efficiently than Types A and B. The average person who made a purchase in Newark terminal remained in the building much less time than those at the other airports, yet they spent substantially more money.

Visitors Accompanying Outbound Passengers. As was found for inbound passengers, departing passengers at New York International had, on the average, a larger number of persons accompanying them than was the case at the other airports. The average departing passenger at Newark has fewer people with him than the number who come to meet arrivals at that Airport, contrary to the findings at the other airports:

La Guardia	20 visitors per 100 outbound passengers
N. Y. International	58 visitors per 100 outbound passengers
Newark	24 visitors per 100 outbound passengers

Visitors with outbound passengers are more frequent spenders at all three airports than visitors meeting incoming passengers. However, these groups are alike in proportion of spenders under all exposures: the percentage that spends is between 61 and 65 for all airports. The exposures are also similar in their effect on the amounts spent. The superiority of the central type (C) in developing revenue from this group is small, and is felt primarily in higher purchases of goods rather than of food or services.

Sightseers. The airports differ substantially in the percentage of sightseers to the population and their contribution to concession revenue, but conclusions for this group may be distorted by the fact that La Guardia and New York International were surveyed during March and April, while Newark was surveyed during December. Comparing the two airports for which data for the same period are available, however, shows that sightseers at New York International were more than twice as numerous as at La Guardia, despite the much greater traffic volume and aeronautical activity at the latter airport. These differences in numbers also are reflected in gross consumer revenue; sightseers provide 7% of the revenue at New York International but only 3% at La Guardia.

Compared with the population as a whole, spending is very frequent among sightseers, although the amounts spent by those making purchases is low. The three airports are approximately equal in the proportions of sightseers who spend, but this group at Newark spends more than those at the other two airports. This is reflected entirely in higher average expenditures for goods. This is one of the two groups at Newark that averaged higher expenditures for goods than for food.

Diners. Although differences have been pointed out in the importance of the various "normal" population groups among the three airports, these differences have been generally limited. In fact, the most definite and positive finding of the three surveys is the similarity in purchasing performance of each population group under all three exposure patterns.

In one respect, however, the population of Newark terminal is radically different from the other two. A number of people come to the terminal specifically to patronize the restaurant. They constitute only 6% of the total population, but account for 41% of all consumer revenue. The counterparts of this group at the other two airports are not large enough to tabulate separately. Newark is an industrial area with few luxury restaurants in the neighborhood. The other terminals are in more populous sections with a considerable amount of restaurant competition.

That so relatively small a group of persons accounts for so large a part of the revenue is due to an average expenditure, for those who reported an expenditure (for food or any other item), of more than six times the average of all people at the three airports. This figure,

however, includes payments for about one and one-third person's purchases, and includes the purchase of goods and services as well as food. Another reason for the much higher average expenditure by this group for food is that the food category in general includes small amounts spent for snacks and soft drinks, as well as meals and alcoholic drinks. But among those who made a special visit to the terminal to eat, it seems reasonable to expect that most had a full meal in the restaurant rather than a short order in the coffee shop or snack bar. This group also spent more for goods, on the average, than any other segment of the population.

Other Visitors and Employees. Even after persons who came to Newark Airport specifically to patronize the restaurant are excluded from "other Visitors," the remainder of the group accounts for 7% of the consumer revenue at that airport. It is a less significant component of the markets of the other airports. By measures of spending presented, this group conforms very closely to the average of the entire terminal population. Because of the necessity to conduct the surveys at the public terminal exits, which employees may not always use, employees may not be represented in the samples in their proper proportions. Nevertheless, the data obtained from those who were interviewed may be revealing. From 70% to 75% of the terminal employees made a purchase in the terminal, while a much smaller percentage of air crew members and people working elsewhere in the airport spent money in the terminal.

The amounts spent by those of the latter group who made a purchase were also smaller than the spending of the terminal building employees. As there is no reason to believe that the time employees spend in the terminal is closely related to their concession patronage, these data are not included in Table 4.

TABLE 1

COMPOSITION OF AIR TERMINAL POPULATION – AVERAGE DAY

	La Guardia[1]		New York International[1]		Newark[2]		
	Number	Percent	Number	Percent	Number	Percent	Percent[3]
Terminal Population	15,205	100%	12,830	100%	5,078	100%	100%
A—Non-Employees	14,289	94	11,370	89	4,696	92	92
1. Air Passengers	11,567	76	6,583	52	2,960	58	63
Inbound: Total	5,165	34	3,681	29	1,269	25	27
Domestic	5,074	33	2,692	21	1,269	25	27
Overseas	91	1	989	8	0	0	0
Outbound: Total	5,163	34	2,686	21	1,426	28	30
Domestic	5,163	34	1,680	13	1,426	28	30
Overseas	0	0	1,006	8	0	0	0
Transient: Total	1,239	8	216	2	265	5	6
Domestic	1,239	8	161	1	265	5	6
Overseas	0	0	55	0	0	0	0
2. Visitors with Air Passengers	1,942	13	3,421	27	781	15	16
Inbound	911	6	1,871	15	441	9	9
Outbound	1,031	7	1,550	12	340	6	7
3. Sightseers	353	2	818	6	297	6	6
4. Other Visitors	427	3	548	4	658	13	7
Diners (Newark only)	—	—	—	—	305	6	—
Others	427	3	548	4	353	7	7
B—Employees	916	6	1,460	11	382	8	8
1. Terminal	555	4	806	6	140	3	3
2. Air Crew and Others	359	2	654	5	242	5	5

[1] Spring, 1953
[2] December, 1953
[3] This column has percentages of total population exclusive of those visitors coming specifically to dine.

TABLE 2
PERCENTAGES OF TERMINAL POPULATION GROUPS THAT SPEND

	Percent of Group		
	La Guardia[1]	New York International[1]	Newark[2]
Terminal Population	39%	44%	48%
A—Non-Employees	38	43	47
1. Air Passengers	34	34	39
Inbound: Total	17	19	21
Domestic	17	21	21
Overseas	*	13	(a)
Outbound: Total	47	53	52
Domestic	47	52	52
Overseas	(a)	55	(a)
Transient: Total	50	63	61
Domestic	50	55	61
Overseas	(a)	*	(a)
2. Visitors with Air Passengers	53	54	56
Inbound	41	48	50
Outbound	63	61	65
3. Sightseers	68	67	70
4. Other Visitors	44	42	61
Diners (Newark only)	—	—	75
Others	44	42	50
B—Employees	56	50	53
1. Terminal	75	70	73
2. Air Crews and Others	28	26	41

[1] Spring, 1953
[2] December, 1953
* Population group too small to yield reliable percentage.
(a) Population group does not appear in survey sample.

TABLE 3
INDEX OF AVERAGE EXPENDITURE PER SPENDER BY POPULATION GROUPS#

	La Guardia[1]	New York International[1]	Newark[2]
Terminal Population	83	98	154
A—Non-Employees	86	103	161
1. Air Passengers	87	117	95
Inbound: Total	70	61	90
Domestic	71	52	90
Overseas	*	104	(a)
Outbound: Total	83	137	95
Domestic	83	135	95
Overseas	(a)	141	(a)
Transient: Total	123	187	105
Domestic	123	148	105
Overseas	(a)	*	(a)
2. Visitors with Air Passengers	88	92	119
Inbound	60	85	119
Outbound	105	101	121
3. Sightseers	70	71	101
4. Other Visitors	79	114	424
Diners (Newark only)	—	—	677
Others	79	114	95
B—Employees	58	66	85
1. Terminal	59	75	96
2. Air Crews and Others	54	37	72

Average expenditure per spender, all population groups, three airports=100.
[1] Spring, 1953
[2] December, 1953
* Population group too small to yield reliable average.
(a) Population group does not appear in survey sample.

TABLE 4

AVERAGE LENGTH OF VISIT TO TERMINAL, BY POPULATION GROUPS, FOR SPENDERS AND NON-SPENDERS (in Minutes)

	La Guardia[1]			New York International[1]			Newark[2]		
	Total	Spenders	Non-Spenders	Total	Spenders	Non-Spenders	Total	Spenders	Non-Spenders
Non-Employees	39	65	23	59	80	42	31	46	18
1. Air Passengers	34	62	19	45	71	31	21	36	12
Inbound: Total	16	30	13	28	44	25	13	24	10
Domestic	16	30	13	29	46	24	13	24	10
Overseas	*	*	*	27	34	26	(a)	(a)	(a)
Outbound: Total	42	61	26	60	76	42	23	33	13
Domestic	42	61	26	53	74	30	23	33	13
Overseas	(a)	(a)	(a)	72	80	62	(a)	(a)	(a)
Transient: Total	73	115	30	120	153	66	52	69	22
Domestic	73	115	30	115	174	44	52	69	22
Overseas	(a)	(a)	(a)	*	*	*	(a)	(a)	(a)
2. Visitors with Air Passengers	57	74	38	80	92	66	41	51	28
Inbound	52	78	34	86	107	67	39	53	25
Outbound	62	72	45	73	77	65	43	48	34
3. Sightseers	68	66	75	64	67	57	43	46	35
4. Other Visitors	63	67	59	72	101	51	60	72	41
Diners (Newark only)	—	—	—	—	—	—	78	75	85
Others	63	67	59	72	101	51	45	68	22

[1] Spring, 1953
[2] December, 1953
* Population group too small to yield reliable averages.
(a) Population group does not appear in survey sample.

THE RIO REVISION OF THE WARSAW CONVENTION — PART I

By George W. Orr

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THE rapid development of air commerce and the important place it has assumed in our modern civilization should challege the interest of all lawyers. Few otherwise well informed men realize the extent of this development, either in magnitude or in safety. The world's scheduled airlines, for instance, flew almost 24 billion passenger miles in 1952 — enough to transport 7 million people, nearly the population of New York or greater London, from New York to Western Europe, or to the Valley of the Amazon.[1] One-third of this immense traffic was international.

United States airlines exceeded the first-class (Pullman) service on railways by 20% in 1952 and carried about a third of the total common carrier passenger traffic (all classes of railway, motorbus and airline accommodation combined) moving over a distance of 120 miles. Over 27 million passengers were carried more than 16 billion passenger miles with passenger fatalities reduced to 0.9 per one hundred million passenger miles — less than one passenger fatality for each 100 million passenger miles flown![2] 1953 will bring the passenger total to about 31 million, the passenger mileage to 19 billion and reduce the death rate to 0.6 per 100 million passenger miles.[3] United States overseas air routes (excluding air traffic with Canada, Mexico, Alaska or Puerto Rico) carried more passengers than travelled by ship in 1952. An international treaty which regulates certain liabilities of our international air carriers, such as the Warsaw Convention, is therefore of general interest and importance.

A movement to codify international air law began with a conference in Paris in 1925 which set up a continuing commission, called Comité International Techinque d'Experts Juridiques Aeriens (CITEJA)[4] to prepare draft conventions for consideration by future international conferences. They created about a dozen, only one of

[1] ICAO Bulletin, June-July, 1953, p. 6.
[2] C.A.B. Comparison of Accidents in Scheduled Operations 1951-1952.
[3] Estimate C.A.B. Bureau of Accident Investigation, Jan. 14, 1954.
[4] C.C.H. Aviation Law Reports, §27,040.

which, the Warsaw Convention,[5] received general adherence by most important nations of the world. That Convention was signed in Warsaw in 1929. The United States adhered in 1934. Briefly, the Warsaw Convention is a "Convention for the Unification of Certain Rules Relating to International Transportation by Air" (its proper name); its application is determined by the contract of transportation and not by the place of accident — when between two nations adhering to the treaty, or from one adhering nation to a destination in that same nation, if there has been an agreed stopping place in another nation whether an adherent or not. It imposes liability on the carrier for injury to passengers, baggage and/or goods unless the carrier can affirmatively prove that it and its agents have taken all necessary measures to avoid the damage (or in the case of baggage and goods that the damage was caused by an error in piloting or navigation) and limits recovery: for death or injury of passengers to the present U.S. currency value of $8,291.87; baggage and goods to $16.58 per kilogram (2.2046 lbs.); and $331.67 for objects of which the passenger takes charge himself, unless the passenger affirmatively proves that the damage was caused by wilful misconduct, in which case there would be no limit. The limitation for bringing an action is two years.

The work of CITEJA was assumed by the International Civil Aviation Organization (commonly referred to as ICAO) which grew out of the Chicago conference in 1944. The drafting of international conventions comes under the jurisdiction of the ICAO Legal Committee. This Committee, among other things, has been studying the revision of the Warsaw Convention for several years, more recently in Madrid in 1952, Paris and Rio in 1953. At the latter Session, it completed a draft and submitted it to the ICAO Council for probable reference to an international diplomatic conference.

The revised text of the Warsaw Convention adopted in 1953 by the Legal Committee at its meeting in Rio de Janeiro is a real improvement over the existing text, and with a few minor but tremendously important corrections, would create a more desirable treaty than the one presently in effect. Based upon my actual experience with aviation claims — foreign and domestic — and litigation growing out of such claims, which I believe to be more than any other man in this hemisphere, it is my considered opinion that the Warsaw Convention has been of real value to both the claimants seeking damages growing out of flights subject to the treaty and to the carriers operating those flights.

Although a lawyer for Underwriters insuring aviation risks, I do not consider myself biased or serving self-interest, since it is the job of insurance companies to insure the risk presented. Whether loss payments are large or small does not particularly affect the insurer's welfare — except that the greater the loss, the larger the premium must

[5] See 5 JRL. OF AIR LAW & COM. 486. 49 Stat. 3000 (1934). Available from Supt. of Documents, Washington, D. C. as Treaty Series No. 876, at ten cents per copy.

be to absorb that loss as well as other expenses and profit, and the amount of profit permitted the highly competitive and closely regulated insurers is largely determined by the premium volume. The final burden of liability falls upon the carrier, whether insured or uninsured, and it is that industry that is primarily affected. My interest in attempting to assist in drafting sound liability legislation, including treaties, is to contribute anything I can that will be to the interest of both the airline and the public, not to give special privilege either to one party or the other. Anything that is good for the carrier and just for the public will ultimately be to the benefit of aviation insureres and to the nation.

The ICAO Legal Committee is to be commended for choosing to use the existing Convention as the basis for amendment rather than the Paris text. There were improvements in the Paris text that are not included in the protocol text, but there were also many ill-advised provisions that in my opinion outweighed the improvements. I personally am still fearful that any action that brings up before the U. S. Senate the present adherence to the Warsaw Convention[6] might result in denunciation of the Convention as now in effect, rather than adoption of the legislation submitted, but of the two approaches, I believe that a short simple protocol, along the line of the proposed text amending the present Convention, would have a better chance of ratification by the U. S. Senate than a completely reformed substitute text.

In this discussion, I will comment upon the protocol text, and then offer what I consider a very important provision that should be advanced by the United States in connection with any action on the Warsaw Convention, or perhaps independently. The objective of the provision would be to cure a deficiency that now exists and which I have not heard discussed in this connection — the creation of a right of action for accidents in foreign jurisdiction. My views and comments, as well as suggested improvements, follow in the order of the Rio draft protocol.[7]

Agreed Stopping Place Should Be Defined

Article I, 2 of the Rio Draft:

> "For the purposes of the Convention, the expression 'international carriage' means any carriage in which, according to the agreement between the parties, the place of departure and the place of destination, whether or not there be a break in the carriage or a transshipment, are situated either within the territories of two High Contracting Parties or within the territory of a single High Contracting Party if there is an agreed stopping place within the territory of another State, even if that State is not a High Contracting Party. Carriage between two points within the territory of a single High Contracting Party without an agreed stopping

[6] *Ibid.*

[7] 20 JRL. OF AIR LAW & COM. 326 (Summer, 1953). DOC. 7425 LC/135 1/10/53 (October 1, 1953).

> place within the territory of another State is not international carriage for the purpose of the Convention."

The phrase "agreed stopping place" is retained in the definition of "international carriage" and the phrase is not defined. This is one of the potential danger spots as a cause of confusion and expensive litigation. Different courts can interpret the phrase differently and this lack of uniformity will cause injustice as between claimants. Agreement means a meeting of the minds of two contracting parties. It is difficult to prove, if literal proof is required by any court, that there was actually a meeting of the minds on a point entirely incidental and otherwise unessential to the journey being arranged. A passenger from Miami to San Juan may not be interested in whether or not his plane stops in Cuba or Haiti, and the matter may not even be discussed. It becomes of interest only in interpreting Article 1, 2. Then it becomes crucial. It seems the height of folly to set up such a trap for expense and delay. An honest effort to make the "international carriage" definition as clear as possible is assumed.

It would certainly clarify the basic definition of scope to define just what "agreed stopping place" means. My suggestion is that it be defined, perhaps as a (b) addition to the revised Article 1, Paragraph 2, to the following effect:

> (b) The agreed stopping place or places, if any, shall be the intermediate landing places indicated by the contract of carriage or the schedule or time table of the carrier or successive carriers involved in the carriage.

Such decisions as we have in the United States indicate that it is sufficient to incorporate by reference the stopping places in the schedule. The object of this protocol, however, is to simplify the carriage documents, as well as to avoid uncertainties and ambiguities necessitating litigation. A definition along the line suggested should accomplish the objective without detracting from the passengers' interest.

Scope of Treaty Should Be Broadened

It is unfortunate that the ICAO Committee, against considerable opposition, decided to recommend no change in Article 1 which defines the scope of the Convention. The reasons given are: (1) that certain additional states intend to accede to the Convention, which makes the definition of the scope of the Convention of diminishing practical importance; and (2) that the provisions would not be binding on non-member states. This reasoning illustrates the theoretical and impractical thinking of some learned lawyers.

As to reason (1) the mere fact that certain national representatives in this changing world have indicated a future intention to accede to the Convention does not justify the decision that the matter is of diminishing practical importance as the Committee asserted.

The statement in reason (2), that the provisions of the Convention would not be enforceable in non-member nations, is quite true. How-

ever, this does not justify the conclusion that such a provision is of little value. If, as proposed in the Paris text, "international carriage" is defined as all carriage between nations or with a stopping place in another nation, it would undoubtedly be of tremendous practical importance to make the provisions of the Convention applicable to claims growing out of such international carriage which are litigated in any member nation.

In a flight, for instance, from U. S. to Afghanistan (assuming the United States to be an adherent and Afghanistan a non-member), it is true that the Convention would not be enforceable in Afghanistan but it would nevertheless be enforceable in the United States. Therefore, a person prosecuting a claim in the United States would be controlled by the provisions of the Convention even though he could avoid the Convention by suing in Afghanistan. From my experience the latter course would seldom be chosen and, therefore, since most major nations are adherents and most passengers come from such nations, most of the claims would be brought in member nations and thus the influence and scope of the Convention would be tremendously broadened. If the Convention is good for the public of adhering nations when the journey is between members, it should be equally good if between a member and a non-member. I suggest that a definition similar to that recommended in the Paris text be used, such as:

> "2. For the purpose of this Convention the expression 'international carriage' means any carriage by aircraft of passengers, cargo or baggage for remuneration when, according to an agreement to carry, the places of departure and of destination are situated either in the territories of different States of which one at least is a Contracting State, or in the territory of the same Contracting State when an intermediate landing has been agreed in the territory of another State, even if the latter is a non-Contracting State."

Should Apply to Carriers in Military Service

Article II, 2, of the Rio draft is revised so that the Convention shall not apply to:

> "(a) Carriage of persons, cargo and baggage for military authorities by aircraft, the whole capacity of which has been reserved by such authorities."

There is no valid reason why the passenger or the carrier should not be given the advantage of the Convention just because the whole capacity of the aircraft has been reserved by military authorities. Perhaps the most important consideration for encouragement of aviation by governments is the tremendous value of an aeronautical industry ready to serve the public interest in time of emergency. The extensive use of privately owned aircraft and government aircraft operated by the flying crews of private air carriers in the Korean incident illustrates this increasing role of private aviation. While some governments may wish to avoid entirely any responsibility in such circumstances, and

may do so under governmental immunity when such exists, the private carrier has no such protection. It is realized that the requirements of the existing Convention are not always complied with in connection with this governmental use but with more realistic and practical requirements for compliance, this may be a matter of diminishing importance. I suggest that the subject sub-section (a) be deleted or preferably redrawn to relieve the government of the liability imposed by the Convention, if desirable, but retaining the application of the Convention to the carrier and his agents.

Notice of Limitation Must Be Alternative

Article III of the Rio draft carries a provision in both 1 and 2, as well as similar requirements in later Articles affecting baggage and cargo, that must be corrected.

> "1. For the carriage of passengers a ticket shall be delivered containing particulars which show that the carrage is international in the sense of Article 1, and a statement that the carriage is subject to the rules relating to liability established by the Convention."
>
> "2. The passenger ticket shall constitute *prima facie* evidence of the conclusion and conditions of the contract of carriage. The absence, irregularity or loss of the passenger ticket does not affect the existence or the contract of carriage which shall, none the less, be subject to the rules of the Convention. Nevertheless, if the carrier accepts a passenger without a passenger ticket having been delivered *or if the ticket does not include the statement that the carriage is subject to the rules relating to liability established by the Convention,* he shall not be entitled to avail himself of any provisions which limit his liability in respect of the passenger."

These provisions, as well as similar ones with respect to baggage and cargo, carry the requirement that I think may be extremely important and certainly should be corrected to avoid needless litigation, delay and expense. That requirement is the provision that the carriage document must contain a definite and unequivocal statement that the carriage is subject to the rules relating to liability established by the Convention. I am thoroughly in agreement with a requirement that the passenger must have notice that the carriage, when Warsaw, is subject to the rules relating to liability. That is not the point. The practical situation is that all international journeys or shipments are not subject to the Convention. Tickets or other contracts for carriage are made out by clerks of airlines, travel and other agencies. They are required to make, not an alternative statement, but the positive statement that the carriage he is selling is subject to the rules relating to liability established by the Convention. This is a legal decision that ticket sellers could not be expected to make. They are not required to give legal advice on the passengers' other legal problems of travel. In some instances, experienced lawyers have disagreed as to Convention applicability to the point that litigation was necessary to determine the issue. It is certainly not fair to expect a clerk to make such a de-

cision or to penalize the carrier with the loss of limitation if he makes a mistake.

While Article 3, Paragraph 1, might be interpreted to require only that the ticket contain particulars which show that the carriage is international and that the required statement about liability depends upon applicability, Paragraph 2 states quite definitely that "if the carrier accepts the passenger without a ticket having been delivered *or* if the ticket does not include the statement that the carriage is subject to the rules relating to liability . . ." the carrier shall not be entitled to avail himself of the limit. The carrier's only defense would be to place a notice in the ticket that, if the journey is international in the sense of Article 1, it is subject to the rules relating to liability, etc. Whether or not this would be a sufficient compliance would depend upon judicial ruling and there is bound to be a lack of uniformity in the interpretations by courts of various nations. The ambiguity will encourage litigation in all nations and, hence, the exorbitant costs and long delays incident to litigation.

The remedy is very simple. Instead of requiring a positive statement that the Convention rules relating to liability apply, it should be sufficient to state that if the Convention applies to the journey, then the rules relating to liability would also apply. The last phrase following the words in Article 3, Paragraph 1, must be changed to read: "And a statement that if the carriage is international in the sense of Article 1, it is subject to the rules relating to liability established by the Convention."

The last sentence of Article 3, Paragraph 2, must be changed to read as follows:

> "Nevertheless, if the carrier accepts a passenger without a passenger ticket having been delivered, or if the carriage is international in the sense of Article 1 and the ticket does not include the statement that the carriage is subject to the rules relating to liability established by the Convention, he shall not be entitled to avail himself of any provisions which limit his liability in respect of the passenger."

Similar appropriate changes must be made in the baggage and air waybill requirements. The notice could then be placed on all tickets, whether Warsaw or not.

Defense Should Be Made More Realistic

The deletion of Paragraph 2 in Article 20, which exempts liability caused by error of piloting or navigation, seems appropriate as it is sort of an imposition of admiralty rules upon an otherwise tort instrument. Paragraphs 1 and 2 really clash in legal theory.

I was disappointed, however, that Article 20 was not amended to more realistically implement the justice involved in the theory of fault as the basis of liability. Paragraph 1 provides:

> "The carrier shall not be liable if he proves that he and his agents have taken all necessary measures to avoid the damage or that it is impossible for him or them to take such measures."

This is the only provision that saves the Warsaw Convention from imposing absolute liability without fault — a doctrine completely repugnant to the American concept of law and justice in connection with passenger-carrier liability. The carrier is not the insurer of his passenger.[8] While extremely valuable in controlling the excessive demands incident to absolute liability, even in its present form, it has proven itself to be most impractical and unrealistic except for such purposes. In all Warsaw litigation that I recall, there has been only one successful defense under this section and that claim was settled before appeal and at the full Warsaw limit. This is because it is difficult to conceive of an accident happpening when all necessary measures to avoid the damage were taken. If everything necessary to avoid the damage had been done, how could there be damage?

As now worded, this provision appears to be an almost meaningless gesture by adherents of imposed liability to our established doctrine that fault must be the basis for liability. It could be easily corrected to more honestly reflect the theory of fault as the basis of liability in connection with the liability automatically imposed by Article 17, and with entire justice to the passenger. I suggest that the paragraph be changed to read:

> "The carrier shall not be liable if he proves that he and his agents have exercised the highest practicable degree of care to avoid the damage."

This would assure to the passenger the ultimate in care, but also would not impose liability upon the carrier to do the impossible in either taking measures he could not take or assuming liability for events he could not control.

Limit for Passenger Liability Increased 60%

Article 22, Paragraph 1. The limit for fatal or non-fatal injury is increased from 125,000 gold francs ($8,291.87) to 200,000 frs. ($13,267) or 60%.

Because of social thinking, but definitely not because of economic inflation, there undoubtedly has been considerable pressure in the United States, in particular, and a few other nations, for a considerable increase in the Warsaw limit, although the official ICAO Report and the final Rio action indicates that the governments of many nations considered the existing maximum limits to be satisfactory. The United States delegation is reported to have been the leader in this movement. This is not surprising, since the U. S. Air Coordinating Committee had previously indicated its position that the United States regarded the question of a substantial increase of liability limits as the only one of major importance.

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[8] Allison v. Standard Airlines, 1 Avi. 462; 1930 USAvR 292.

Regardless of the unquestioned importance of the question of limits, such a position shows a lack of proper appreciation of other practical considerations involved. I am reliably informed that the U. S. delegation went so far as to vote against the adoption of obviously needed changes — like the Escape Clause that was responsible for most of the litigation, expense and delay to claimants under the existing Convention. The chairman of the U. S. delegation is quoted[9] after the conference as reiterating the position that, while there were some defects in the Convention, they were not serious, except the one case of the limit. He was said to state that raising the limits is not a legal but an economic problem, and I got the distinct impression that he would be quite happy to change only the limit by protocol, leaving the airlines without relief from the confusion and inequities of the other provisions that need clarification and correction. I regret that I can find little evidence in either the attitude of the U. S. delegation or the ICAO Legal Committee membership as a whole that justice to the airline is to be considered when it conflicts in any way with the privileged position of a claimant for damages.

Limit on Recovery an Economic, Not a Social Problem

It is true, of course, that the amount of the limit is an economic problem, as our delegation chairman says, but our delegation refuses to subject it to economic reasoning. They insist upon political reasoning. I shall discuss this more at length later, but for the moment give the "economic" reasons for increase as stated in the official ICAO Report of the Rio meeting.[10] It will be noted that these are not economic reasons at all except perhaps in the socialistic sense.

Reason (1) is that judicial awards of damages in non-Warsaw cases are often much higher than the Warsaw maximum. That is just as silly as stating that a few men in the United States are 7 feet tall; therefore, the standard height of men is 7 feet. There have been a few — a very few — runaway verdicts for passengers in non-Warsaw cases. Such instances are fractional as compared with the hundreds of non-Warsaw cases settled in relative comparison to the Warsaw limit. This sage economic basis does not also say that there have been a few cases also in which the plaintiff received no award at all. Does it follow, as an economic conclusion, that the Warsaw limit should be decreased to zero?

Reason (2) was that the record of air safety had vastly improved since 1929 and, therefore, the carrier is now involved in lower risks. Consequently, he should be prepared to pay higher amounts on fewer accidents. That is most questionable as an economic reason to indicate a proper limit on recovery.

The improvement in the safety record would (as it has) cause a reduction in the premium rate, but there is no legitimate connection

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[9] American Aviation Daily, September 30, 1953.
[10] ICAO DOC. 7425.

whatever between the premium rate paid for insurance and the economic consideration of a proper limit for damages. What interest could a passenger or his heirs have in the amount of premium paid by the airline? How could it affect the economic factors involved in an amount that would be fair as a limit, completely without regard to what airline caused the injury or what that airline was paying in insurance premiums? This and other reasons advanced by the U. S. delegation, apparently relying upon a report of the Air Coordinating Committee's Economic Division,[11] discussed later, can only be based upon the highly socialistic theory of "ability to pay" as a criterion for liability.

Reason (3) argued that the cost of an increase reflected in the additional insurance premiums payable, in relation to the cost of all air transport generally, was small. Again, the economic considerations affecting "ability to pay" are confused or deliberately substituted for an economic consideration of what would constitute a proper limit of liability. Again, it must be said that the claimant is not interested in the slightest in the relative cost of insurance or the cost of air transport generally. The defense is that the Legal Committee and the delegates are concerned also with the economics of the airlines and do not wish to put a greater burden on the airlines than they can bear. I regret that I have been unable to find any solicitude for the airlines in the past Sessions of the Legal Committee, or in the Rome 1952 conference, when Rome and Warsaw revisions were being discussed. I have the distinct impression that the decision was first made to substantially increase the limitation for social reasons and then the interest, both of the U. S. delegation and ACC Economic Division, was to prove that the higher limits could be paid without economic disaster to the airlines.

The ACC Economic Division Report

Let us look briefly at the contribution of the ACC Economic Division in its effort to justify an increase in the present Warsaw limit. In the report just referred to, the only relevant statistic produced by that report fully substantiated the fact that the limit presently provided in the Warsaw Convention had more than kept economic pace with rising costs. In its attempt to determine the "real value" of the present Warsaw limit, the ACC Economic Division states:

> "The liability limit (125,000 gold francs) in terms of U. S. dollars increased from $4,898 in 1929 to $8,292 at January, 1953. Thus, the gold value in currency was increased 169% of the 1929 level while the cost of living index has gone up to 156% of its earlier level, *resulting in an 8% increase in the buying power of the gold franc within the United States.*"

Proponents of increase contend that there is no evidence that the limit fixed in 1929 was right. The fact is that I know of no proposition that has been so overwhelmingly proven. That the limit was right in 1929 and is right today in most of the nations now adhering to the

[11] ACC 51/22, 14A.

Warsaw Convention is amply proven by the fact that most leading nations have adopted the Warsaw standard as their non-Warsaw and domestic standard and in some cases have established lower standards. My information is that such nations include Belgium, Brazil, Denmark, Finland, Germany, Greece, Holland, Hungary, Italy, Luxembourg, Mexico, Norway, Poland, Spain, Sweden, Switzerland and — to prove that the limit is still in line with the standards of the times — the great nation of the United Kingdom adopted the Warsaw standard of liability for its domestic standard in 1952. The ICAO official report of the Rio conference, itself, admits that "some members of the Legal Committee stated that their governments considered the existing maximum limits of the Warsaw Convention to be satisfactory." It seems quite evident that these proponents of increase want more money for the claimant, not evidence that the Warsaw limit is economically insufficient. The objective of an international convention, intended to be appplicable to all parts of the world, must take into account the different economic and monetary conditions in different nations.

In this connection, a brief look at the "economic conclusions" of the U. S. Air Coordinating Committee's Economic Division is revealing. It is apparent that the economists making the report are confused as to the difference between accident and liability protection. In any event, they appear to forget that the Warsaw Convention and the revision of same deals with liability, not accident insurance. They appear to ignore the fact that the carrier is not the insurer of his passengers and should not be, according to American law. His legal obligation to the passenger is to use the highest degree of care, not to guarantee safe passage regardless of conditions beyond his control.

Next, not one of their conclusions — except that the real or economic value has increased since 1929 more than the cost of living — has anything to do with the adequacy of the limit. They go about justifying an increase by the use of the most amazing figures.

They show that insurance cost has gone down and that the cost of insurance is less than the cost of passenger food. What possible connection does insurance cost or the cost of passenger food have with respect to the adequacy of the liability limit? It would be just as reasonable to say that ability to pay is the proper criterion for setting a limit.

(TO BE CONTINUED)

THE PROBLEM OF COMPETITION AMONG DOMESTIC TRUNK AIRLINES—Part II*

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What Is Airline Competition?

What Are the Advantages and Disadvantages of Competition In Free Enterprise?

THIS part briefly outlines some of the pros and cons of competition and monopoly in the free enterprise system. It is not meant to be a full catalog of arguments either in economic theory or in business fact; such weighty projects have been done at great length in many other places.

The arguments for competition are that it produces maximum quality of service, does it at minimum cost, keeps profits low but adequate to continue business, eliminates the weakest producers and raises the efficiency of the industry by leaving only the strong firms in existence, distributes capital and labor into the most desirable channels, and balances supply and demand in the entire economy at the point of lowest price and highest production.

The really basic argument for competition, from which all benefits come, is that it provides strong and continuous incentive to progress. Initiative is stimulated by rivalry continually to make improvements, to adopt new inventions and to devise new business methods rapidly, to eliminate wastes, to go after new markets, to lower profit margins. All of this cuts the costs of production and the selling prices, which then broadens the market to more consumers, which in turn allows still more economies of large-scale production, and so on in a continuing beneficial chain of progress.

By contrast, monopoly has the reverse effect. It aims at maximum profit, just as does all business. But, being a monopoly, it accomplishes this identical objective by opposite means. The keystone of monopoly is control of the market. It then stabilizes prices to produce the highest gross dollar profit, which is usually at a higher unit price, with output restricted to what it can sell at its own fixed price. Similarly, it tries to hold its investment as low as it can, and with minimum risk; it therefore continues using old equipment and old business practices after a competitive industry would have been forced to discard them

*This paper is an abridgement of the author's Ph.D. dissertation. The views expressed are entirely his own, and not those of the government agencies of his present or past employment.

under threat of bankruptcy. Although it may reduce costs, it does not have the spur of competition to force improvements. Its whole tendency is toward higher prices and a smaller market, restricting benefits to fewer consumers.

Practically no one is for unregulated monopoly. But many people realize that the benefits of competition are not produced without considerable additional costs. There are higher operating costs, higher capital costs, a higher rate of loss on obsolescence and unsuccessful experimentation.

In operating costs, competition has the wastes of multiple managements performing duplicate jobs with multiple operating organizations, purchasing, legal, research, and accounting departments. There are wastes of lower utilization, with each competitor geared up to handle his individual peak. There are the wastes of competitive advertising and sales efforts. There is the waste of secrecy in hiding better methods from competitors.

In capital costs, competition has the wastes of excess capacity. It needs enough to match the peaks of competitors. It requires more reserve capacity, since several small operations take a higher percentage of spare capacity than does one large operation. And the financing expenses of several smaller companies are higher.

The function of management is largely to adapt an industry to change. This is often difficult, especially during times of rapid changes in technology, government policies, and international alarms. But even this is easier for an entire industry than for an individual company with many competitors; not only is there the estimating of industry trends, but the added complexity of estimating the individual firm's share of this estimated trend.

The added burden on competitive managements makes planning errors more likely, and of greater magnitude. It is particularly critical in cyclical business swings. On the upswing each competitor adds capacity, either overlooking the fact that the other competitors are doing the same, or forced into dubious expansion to retain his share of the market; there is then overexpansion in the aggregate. On the downswing, each keeps his production too high, afraid to cut down while a competitor maintains output and increases his share of the falling market. In an industry like air transportation, where several years elapse between the orders for new capacity and the delivery of the aircraft to produce it, errors of planning magnify the usual swings of business cycles.

The conclusion reached in this paper is that in the air transportation industry, the advantages of competition are outweighed by its costs, and competition should therefore be drastically reduced. This should not be misconstrued as an attack upon the advantages of competition in the economy as a whole, or as an advocacy of reducing or eliminating competition in the American free enterprise system. The conclusion is reached solely for the subject of this study – the air transport industry which differs in many major respects from the rest of

the economy; the effect of competition in this industry is far different from what is would be in the bulk of other industries.

For the American economy generally, competition has a tremendous value apart from its advantages or disadvantages in any particular industry. It acts as an automatic regulator for most of the economic effort of the country. By its intricate mechanisms of price, profit, loss, supply, and demand, it allocates the nation's resources. It allocates capital, labor, and raw materials into fields which in the long run are believed to produce the greatest profits. These are generally guided by what consumers are most willing to purchase, and are therefore closely responsive to the nation's effective economic demand.

In thus allocating resources to satisfy the effective market, competition does so with a maximum of individual initiative and managerial freedom. If any attempt were made to do so by centralized direction and control, it would require a tremendous bureaucracy with powers to plan effectively and, whether actually employed or not, power to dictate and regiment the economic life of the nation.

These are great advantages for society as a whole, and are not to be lightly dismissed. They are basic to the free enterprise system and are ingrained in the national tradition. Of course, like any human endeavor, they are far from perfect. When any economic machinery is moving, there is always some clanking and gear-clashing. Competition is not perfect as a regulator, and its workings are not perfect. Its operations incur major costs to pay for its advantages. But for the American economy, the overwhelming consensus of opinion is that the competitive system works to a better overall advantage than would a system of centrally directed monopolies.

This applies to the average industry. But certain industries differ greatly from the nationwide average. Some segments of the economy are not allowed to operate freely under the usual economic laws, and this restriction is imposed by law and with the consent and even at the insistence of the people. Air transportation is such a segment, and competitive considerations for the economy as a whole do not apply to this industry, regardless of how advantageous they are for most industries.

What Is Unregulated Competition?

Among sellers, competition is rivalry for the buyers' income. In its usual sense, competition is thought of as rivalry among the producers of the same commodity or of the same service, or of a group of close substitutes.

Defining close substitutes becomes very difficult in specific cases. An airplane trip for pleasure competes closely with a train or auto trip, with a new television set, and with the dozens of daily expenses that eat up a family's income. Here is a basic trouble in defining competition: all consumers' goods compete to some extent with all others. The perfect competition described in the economic textbooks has at least four major prerequisites.

First, no single producer can appreciably affect the market price. His output is small in relation to the total industry. He therefore assumes that the selling price is beyond his control, plans only as much production as he believes he can sell at that price, and then sells all his production at whatever price the market will bring. There are no large producers who influence prices.

Second, his product is perfectly standardized. A potential customer can't tell one producer's output from another's. There is no brand-name preference and there is little reason for the multi-billion-dollar advertising business.

Third, entry into the market is perfectly free, and of course exit from it is just as free. If any new producer, foreign or domestic, can meet the market price, he is in business. There is no hazard in trying to break into an established industry, as long as the market price can be equalled.

Fourth, the industry is free from government interference, and from non-commercial incentives. There are no import or export tariffs, no production quotas, no price controls, no direct or indirect subsidies, no certificates of public convenience and necessity.

Obviously, this is not the competition of the real world. Few businessmen would recognize it. Economists generally admit that this is just an ideal standard,[64] a thing of intellectual imagination,[65] something which probably does not exist, never did exist, and never can exist.[66] It is therefore obvious that any assumed characteristics of competition can be no more realistic than the unrealistic assumptions of their underlying theories.

In practice, of course, there is very imperfect competition. It is generally what is known by the paradoxical name of "monopolistic competition," where producers have so differentiated their products in the minds of the consumers that there is sluggish reaction to price changes.[67] There are various shades of gray, rather than the pure white of competition and the pure black of monopoly, produced by historical development, custom and compromise, individual men's personalities, and such common practices as trade association standardization, price leadership, patent controls, market sharing, "fair trade" practices, and so on.

It is usually impossible to define the extent and type of competition existing in any specific industry. A major investigation of the concentration of economic power[68] defined effective competition as existing where (1) producers are numerous, (2) the degree of con-

[64] J. M. Clark, "Toward a Concept of Workable Competition," *Readings in the Social Control of Industry* (American Economic Association; Philadelphia: The Blakiston Company, 1942), p. 453.

[65] Walton H. Hamilton, *The Pattern of Competition* (New York: Columbia University Press, 1940), p. 5.

[66] Clair Wilcox, *Competition and Monopoly in American Industry* (U. S. Temporary National Economic Committee,, Monograph No. 21. Washington: U. S. Government Printing Office, 1940), p. 3.

[67] *Ibid.*, p. 4.

[68] *Ibid.*, p. 20.

centration is low, (3) business mortality is high, (4) capacity is largely used throughout business cycles, (5) different firms' prices are not identical, (6) production stays up when a depression strikes, (7) profits are moderate, and (8) prices are not rigid for long time periods. On this basis, the domestic trunk airlines achieve effective competition only on the last two of the eight items.

What Is Unregulated Monopoly?

A theoretically perfect monopoly can exist only when three conditions are met. First, a monopolist must be the only producer. There must be no other seller in the market, and no potential competitor.

Second, there can be no substitutes for the product or service. There must be so little substitutability that the monopolist can take advantage of his privileged position to set his selling price with the certainty that the consumers can turn to no alternative source. Of course, potential consumers may choose to do without the product, and as the monopolist raises the price his number of sales normally goes down. He therefore theoretically adjusts his price so that the decreased number of sales multiplied by the increased unit price produces a maximum gross dollar profit.

Third, there must be no possibility of government interference. Obviously, a monopolist's policy will be affected when he knows that even in the absence of potential competitors there is a threat of governmental action.

Monopoly is usually associated in people's minds with the idea of a single producer in the field. It is true, of course, that a single producer has maximum freedom to control his prices and therefore maximum monopoly power. However, a true monopoly must satisfy the conditions, not only of a singleness of producer, but also of no substitutability of product and no government interference.

When there are two producers – duopoly – each of the two is likely to set his pricing policy with an eye on the probable reaction of the other. He knows that his own price cut will usually be matched by his rival, with a lowering of price but no increase in his share of the market. The net effect of duopoly is therefore generally the same as of monopoly, with prices deliberately adjusted to produce the highest estimated gross profit.

When there are a very few producers – oliogopoly – there is usually the price stability of a monopoly. As in the case of duopoly, each producer knows that his price cut will be met by the others.[69] There is, of course, somewhat less predictability, since with an increase in the

[69] ". . . when there are only two or a few sellers . . . the result of a cut by any one is inevitably to decrease his own profits, no one will cut, and, although the sellers are entirely independent, the equilibrium result is the same as though there were a monopolistic agreement between them." Edward Hastings Chamberlin, *The Theory of Monopolistic Competition* (fifth edition; Cambridge: Harvard University Press, 1946), p. 48.

number of managements there is an increase in possible differences of managerial opinion.

The keystone in the structure of monopoly power is control over price. All economic theory of monopoly is based on this fact. All fear of monopoly in the real world of business and politics is based on this fundamental power. The greater the control over price, the tighter the monopoly.

The government has increasingly taken over this control from private managements. It has done so in the economy as a whole through deficit financing, labor legislation, and taxes. It has done so in dozens of specific industries through detailed price controls, direct and indirect subsidies, minimum price supports, tariffs and import quotas, production limitations, and huge volumes of government contracts. And of course, it has done so to the maximum whenever it sets up direct regulation of an industry. When any industry has its prices subject to detailed approval by a government agency, it has lost the indispensable element of monopoly power — control of price.

What Are the Advantages and Disadvantages of Competition in Regulated Public Utilities?

Major segments of the economy have been removed from the workings of the free enterprise system and placed under public regulation. They include the local public utilities — electricity, gas, and water; communications — telephone, telegraph, radio, and television; and transportation — by seaway, inland waterway, railway, highway, and airway.

Most of these industries were once an integral part of the free enterprise system. Competition once was open for these industries, and competition was found wanting. In the words of the Supreme Court, "The introduction in the United States of the certificate of public convenience and necessity marked the growing conviction that under certain circumstances free competition might be harmful to the community. . . ."[70]

In these industries, competition frequently led to industrial warfare with unstable prices and undependable services. The destruction of utilities came about through cut-throat competition. Under such conditions, each carrier competitively reduces his prices until they cover only variable costs and fail to meet the fixed costs. The reason for this is that if no traffic at all is carried, not only does the carrier fail to meet its fixed costs, but also fails to meet much of what is usually classed as variable costs; it is better to carry traffic and lose some money than not to carry traffic and lose more.[71] Investment per unit of output

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[70] 285 U. S. 262 (1931), New State Ice Co. v. Liebmann, p. 282.

[71] D. Philip Locklin, *Economics of Transportation* (revised edition; Chicago: Business Publications, Inc., 1938), p. 149.
Truman C. Bigham, *Transportation: Principles and Problems* (New York: McGraw-Hill Book Company, Inc., 1946), p. 113.

was often too high, and the wastes of duplicate facilities were particularly heavy. When the utilities went bankrupt, the dependent communities were left without service. In addition, the struggle often led to monopolistic combinations and agreements to eliminate competition, without the safeguard of public regulation. As the Supreme Court said about such costs, ". . . when a railroad inflicts injury upon its rival, it may be the public which ultimately bears the loss."[72]

The process of carving individual industries out of the free enterprise system was not done on the basis of some cohesive economic theory. It was done by diverse legislative bodies, responsive to many specific pressures that mixed economics, politics, social movements, and the strength of particular personalities. It was upheld by the decisions of a long line of judicial bodies on a case-by-case basis.

What is the definition of a public utility, other than a mere listing of industries in which regulation has been upheld by the courts? Many attempts have been made at analytical definition. The most common characteristics appearing in these definitions are "natural" monopoly, indispensability of product, the sale of service rather than commodity, nonstorability of the service, relatively great capital investment required, large scale of operations needed for efficient operation, etc. More characteristics can be added as more authorities are consulted.

One unfortunate defect in these attempted definitions is that they do not all apply to all public utilities. Tremendous differences exist in almost all these characteristics. Within transportation alone, for example, consider the contrasts between a huge railroad network with its own rights-of-way and a one-man trucking outfit using public highways, or between a scheduled intercontinental airline with its fleet of costly planes and a nonscheduled air carrier operating one or two leased aircraft.

The other unfortunate defect in these attempted definitions is that many of the characteristics also apply to unregulated industries. Consider, for example, the "natural" monopoly of aluminum ore sources, the indispensability of food, the rise of entire industries producing only services, the nonstorability of newspapers' news, and the huge capital investments of steel mills.

In short, most definitions omit much of what they purport to include, and include much of what they are supposed to omit. In general, "the significant factor surrounding public utilities has been the imperfect operation of economic forces, thereby giving the utilities an excessive amount of economic power over those obliged to bargain with them."[73] Their designation is only partial, and is historical and legal rather than a matter of economic theory.

Public utilities live in a predominantly free-enterprise competitive

[72] 270 U. S. 266 (1925), Texas & Pacific Railway v. Gulf, Colorado and Santa Fe Railway Co.

[73] C. Woody Thompson and Wendell R. Smith, *Public Utility Economics* (New York: McGraw-Hill Book Company, Inc., 1941), p. 56.

system. The criterion of normalcy taken for them by the regulatory agencies is therefore an estimate of how the industry would behave if it were still responsive to the competitive system. This is obviously an impossible task; if they responded normally to the competitive system they would not have been designated as public utilities. In addition, the concept of regulation has gradually shifted from control of utility abuses to public managerial supervision for improving service and reducing cost.

But regulation, like free competition before it, has also been found wanting. It is the view of many critics of public regulation that it cannot take the place of competition as an incentive to progress. Regulation still predominantly stresses the negative aspect of prohibiting abuses, rather than the positive drive for new achievements. It also loses initiative by splitting control between itself and private managements. Its usual policy of fair return on fair investment is a drag on initiative, since gains in efficiency and reductions in cost frequently produce price cuts ordered by the regulatory agency, and the utility ends up with no greater profits than before. The utility's legally protected position also relieves it of the stimulus of freely competitive threats.

There is a widespread belief that regulated businesses are slower to introduce technological advances. This is difficult to prove or disprove. For one thing, the investment situations are far different. Public utilities typically have an investment per dollar of annual gross revenue of five-to-one or six-to-one, compared to a ratio of one-to-one for manufacturing firms, and of one-to-four or one-to-five for trading corporations.[74] Obviously, industries with such high relative investments will be very cautious in making obsolete their huge investments, regardless of regulation. And they have many advances to their credit — completely automatic telephone systems; extremely efficient generation and distribution of electricity; even in railroads, frequently thought of as backward, a one-third increase of traffic per labor man-hour occurred in the single decade 1929-1939 while volume fell one-fourth.[75]

But whether or not it is true, it is generally believed that regulated industries show slower technical advances. And, after balancing the unsatisfactory results of competition against the unsatisfactory results of regulation, many people have decided on the compromise of using both in combination. This seems to be at the heart of the problem of regulating a number of public utilities.

This is a real dilemma. On the one hand, there is the argument that if there are two imperfect methods, the proper solution is to

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[74] Irston R. Barnes, *The Economics of Public Utility Regulation* (New York: F. S. Crofts and Co., 1942), p. 53.

It should be noted that airlines differ markedly from other public utilities in this respect; the ratio of investment to gross annual revenues for the domestic trunk airlines was only 0.6 in 1952.

[75] Arthur F. Burns, in his Introduction. Thor Hultgren, *American Transportation in Prosperity and Depression* (New York: National Bureau of Economic Research, Inc., 1948), p. viii.

combine them and take advantage of the best of each: "Given two instrumentalities each of which has limitations, it would seem the part of wisdom to continue to rely on the eclectic principle that their combination may be expected to give better results than either a "free market" or governmental direction could produce separately."[76] On the other hand there is the argument that if there are two unsatisfactory methods, the solution is to strengthen one or the other and use it exclusively, not "to combine uneconomic competition with phlegmatic regulation, on the hypothesis that two failures fused spell success."[77]

How Does Regulation Affect Airlines?

It is frequently pointed out that airlines do not show many of the characteristics usually associated with public utilities. For this reason many believe that legal one-carrier monopolies are not desirable in air transportation, but that a greater degree of competition can be mixed with public regulation.

For one thing, the usual public utilities' high ratio of investment to annual revenues is not applicable to air transportation. As was pointed out previously, this ratio is five or six to one for utilities, but only 0.6 to one for airlines; the heavy fixed capital charges which pressed many unregulated utilities toward cut-throat competition are minor here.

For another thing, it is claimed that air transportation does not have the high fixed costs typical of most public utilities. This is literally true, but it is also true that the charges which are normally considered fixed in other industries are converted into variable costs for the airlines. Railroads and pipelines must pay for their right-of-way in capital costs. Motor transports, water transports, and air transports do not; they use publicly maintained ground facilities. However, they pay varying percentages of the estimated ground facility cost; the airlines pay something for the use of airports and airways, and the problem is currently being studied of having them pay to an increasing extent.

Another fixed cost is depreciation. In the case of airlines, this approaches a variable cost, not because there is no depreciation, but because the major capital asset — aircraft — has such a high rate of obsolescence that they are written off the books in the very short time of seven years. Numbers and types of new aircraft can be more rapidly adjusted to traffic demands, and therefore do not provide excess capacity hanging over the market for an extended time. And, though fixed charges as such are not high, it should be remembered that indirect costs are higher than direct operating expenses for this industry.[78]

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[76] Burton N. Behling, "The Nature and Control of the Transport Market," U. S. National Resources Planning Board, *Transportation and National Policy* (House Document No. 883, 77th Congress, 2nd Session. Washington: U. S. Government Printing Office, 1942), p. 242.

[77] Burton N. Behling, *Competition and Monopoly in Public Utility Industries* (Urbana, Ill.: The University of Illinois Press, 1938), p. 80.

[78] U. S. Civil Aeronautics Board, *Recurrent Report of Financial Data.*

It has also been objected that this industry is still in its infancy, with rapid changes taking place technically in aircraft and navigation, and financially in costs and types of services. However, it should be remembered that airlines have been operated under private managements for over 25 years, a fairly respectable age for an "infant."

The fact that air transportation has been subjected to public utility regulation reveals some of its original economic characteristics. But more important is the fact that regulation is now their dominant feature. Air transportation is probably the most highly regulated of all public utilities. In addition to all the standard regulatory measures, it is also under the powerful economic control of government-granted subsidies.

There is a long and important list of specific economic controls imposed by the Civil Aeronautics Act which remove this industry from comparability with the normal free enterprise system: entry into business only upon receipt of a certificate or exemption by the CAB, transfer or abandonment of a route only by permission of the CAB, control of prices and joint fares, adequacy of service control, duty to carry all mail offered, regulation of relations with anyone in any phase of aeronautics, keeping accounts in prescribed form, compliance with labor provisions of the Railway Labor Act.

All these government chains on individual commercial liberty would seem to be exquisitely designed to prevent any businessman from even dreaming of entering the industry. Why, then, do dozens of applicants continually attempt to squeeze themselves into such an uncomfortable straitjacket?

The inducement is not the fact that, like other public utility industries, they are protected from competitors. The CAB often allows parallel competition.

The real inducement is the mail pay provision of the Act. In fixing the rate of compensation for carrying the mail, the CAB must take into account the need of each carrier for enough revenue from all sources to enable it to continue to develop air transportation.[79]

This does not mean the CAB guarantees a profit to each carrier each year. But it does mean that in the long run each carrier holding a certificate has the prospect of receiving enough revenue, between its commercial business and the government's mail payments, to keep going. Under reasonable management, it cannot go bankrupt. Unlike most other private businesses, or most public utilities, it is not dependent solely upon revenues from its commercial customers. The U. S. Treasury is always its ultimate financial resource. Under the existing Act, this guarantee goes on forever.

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[79] "In fixing and determining fair and reasonable rates of compensation . . . the [CAB] shall take into consideration . . . the need of each such air carrier for compensation for the transportation of mail sufficient to insure the performance of such service, and, together with all other revenue of the air carrier, to enable such air carrier under honest, economical and efficient management, to maintain and continue the development of air transportation to the extent and of the character and quality required for the commerce of the United States, the Postal Service, and the national defense." (Sec. 406b).

"Free enterprise" means freedom to compete, freedom to enter into business, freedom to set prices, freedom to provide any quality of service the businessman deems best, freedom from more government regulation than other businesses, freedom to operate under normal profit-and-loss economic motives without government guarantee. Each of these freedoms has an immediate and direct bearing upon the competitive behavior of the industry, and upon the benefits of competition to the industry and to the public whose free economic actions support the industry. Any attempt to apply the concepts of competition as envisioned under free enterprise conditions, must be reexamined very critically when trying to apply them to an industry lacking these freedoms. Loss of a single one of these freedoms makes a great difference; loss of all of them produces a set of considerations far outside the familiar economic analysis in which competition is usually examined.

How Does Subsidy Affect Airlines?

A basic assumption in all thinking about economics is that the dominant long-run business motive is to acquire monetary profits and to avoid monetary losses. Fear of bankruptcy is the continual goad to management, and bankruptcy is the ultimate test of business survival.

Obviously the subsidy provisions of the Civil Aeronautics Act have exempted airline managements from this threat as long as they maintain honest, economical, and efficient management. It therefore pervades all managerial decisions and may reduce their incentive to greater economy and efficiency. It may easily foster uneconomic competition, for competition between companies each of whose competitive losses may be charged to the federal Treasury is scarcely the same kind of creature usually thought of when using the word "competition."

It is not intended here to argue the pros and cons of airline subsidy. The word itself, in popular usage, has a most unpleasant connotation as though the subsidized industry — if other than one's own — is engaged in a legal but morally shabby raid on the taxpayers. In economic theory, on the other hand, a subsidy is a payment made in order to produce some estimated public benefits not measurable in dollars. Balancing the benefits against payments is difficult: how many dollars a year is it worth to this country to have the great speed and convenience of air mail? How many dollars a year is it worth for business and pleasure travel to save time by air transport? How many dollars a year is it worth to have a reserve of planes and trained men ready for immediate strategic support of possible war operations?

Air transportation receives different kinds of subsidies. One kind is directed to the industry as a whole rather than to any specific beneficiary; it is the uncharged-for portion of public financing of airports, airways, weather services, basic aeronautical research, military underwriting of the cost of new transport prototypes. Another kind is made by some air transportation customers paying in part for the transportation of other customers, as when the profits made from the customers on

high-density routes and large traffic centers offset the losses from the customers at equal fares on the low-density routes and small traffic points. Another kind of subsidy is the special privilege granted by a public franchise, when a carrier may enjoy the monopoly or oligopoly of a profitable route which might well be profitless if subjected to unlimited competition. And the other kind — the only kind that is usually thought of when using the word "subsidy" in connection with airlines — is the direct mail payments made to individual carriers after deducting the estimated "service" cost of carrying the mail. All of these subsidies have varying degrees of influence upon each airline. It is of particular importance to note that subsidy in the form of granting favorable route franchises may eliminate all thought of "subsidy" assistance from the public mind since it normally reduces the direct mail payments usually associated in the public mind as the "subsidy" to airlines.

The objectives of the Civil Aeronautics Act require the payment of subsidies for an indeterminate period of time. The Act is to promote, as well as to regulate. It provides for the long-range future, as well as for the immediate present. As such, it clearly calls for expansion by artificial stimulation beyond the justification of current economic conditions. This means that at any given time, the expenses for promotion ploughed into the services will frequently be greater than the revenue reaped from the promotional effort at the same time. They are not necessarily greater than the revenues they produce at a later time, although with continued promotion the expenses at that later time will again be out of phase with the still later revenues which should theoretically be balanced against them. A sound economic system for air transportation, therefore, is not current economic self-sufficiency, but the promise of self-sufficiency at a time of maturity at some unstated period in the future. In the meanwhile, there is over-expansion and excess capacity if judged by normal economic criteria.

The mail payment provisions of the Act do not guarantee regular profits to the airlines. The industry is highly unstable in its financial results, depending among other factors upon the overall economic activity of the country, the relative changes in traffic and capacity and the resulting load factors, the costs of a rapidly developing technology, and the unit prices of what the airlines buy in the general economy. This instability is shown by the wide range of results for the domestic trunklines since the end of the war, from a net loss of some $22,400,000 (after mail pay of almost $21,380,000) for the year ended June 30, 1947, to a net operating profit before taxes of $106,300,000 (including mail pay of $40,000,000) for the year ended September 30, 1951.[80]

The CAB mail payment procedure is based primarily on estimates of future revenues and expenses. These estimates have hit wide of the mark because of the many factors affecting revenues and expenses of the airlines.

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[80] U. S. Civil Aeronautics Board, *Recurrent Report of Financial Data.*

Many airline losses have been due in the opinion of the CAB to errors in managerial judgment. The CAB has repeatedly said that it will judge the wisdom of the carrier managements' decisions, and will not make a blanket underwriting of all their losses; it has frequently disallowed many airline expenses in mail rate cases. Obviously, the government has a heavy stake in the airline operations, and therefore has a heavy influence in many of the decisions that produce those results.

These subsidy considerations, then, further remove the air transportation industry from the usual free enterprise system; protection against the acid test of bankruptcy, government power over many airline decisions because of direct mail payments, and the fact that the industry is not necessarily supposed to achieve economic self-sufficiency as of any particular time. To this extent, the thinking about competition and monopoly, carried over uncritically from the free enterprise system, should be modified.

How Does National Defense Affect Airlines?

Another limit on the application of free enterprise theories to air transportation is the strong national defense interest in the industry.

This industry has a double role in time of war. One is that, like almost all other industries, it must maintain its output as a part of a war-supporting economy; with modern war techniques, the speed of air transport in mobilizing the country is of increasing importance. The other role is that, unlike almost every other industry, it can be used as an end product in direct strategic support of combat operations as effectively as the Air Force's own transports. This use has led to the industry being thought of by many authorities as in large part a direct auxiliary of the military forces.[81]

During the last war, the air transport industry was used in both roles. Shortly after the United States entered the war, almost half of the civil aircraft were requisitioned by the Army for direct military operation. Part of the airlines' remaining planes, facilities, and personnel were also used for military training, special military flights, modifications of military aircraft, etc. In their role as part of the war-supporting economy, the airlines carried essential passengers, cargo, and mail under a priority travel system.

Detailed plans have been drawn up for use in a possible future war. Hundreds of long-range four-engined civil planes are to be operated in direct support of military operations, to be modified and available to fly military routes on 48 hours notice, to be manned and maintained under contract by civil air carrier personnel and facilities. This is the Civil Reserve Air Fleet plan adopted by the Departments of Defense

[81] U. S. Congress, Congressional Aviation Policy Board, *National Aviation Policy* (80th Congress, 2nd Session, Joint Committee Print. Washington: U. S. Government Printing Office, 1948), pp. 4, 5.

and Commerce and now being put into effect on a standby basis.[82] The remaining civil planes are to be allocated to essential civil routes, to carry essential traffic as determined in wartime by an air priority system.

Of course, air transportation is not alone in having an essential mobilization role. Other industries are also being expanded to be ready for war. How is air transport particularly important, then? The answer is: the time factor. The theory of U. S. war mobilization planning is that relatively small and mobile military forces in being will fight what is essentially a holding action, while the standby war-production plants go into operation to turn out armaments which will throw their power into battle months later.

However, air transport is an essential part of the initial holding action. As a direct military adjunct it must go into operation in a matter of hours, not months. Other industries can build up their physical plants and then leave them in "moth balls" to be manned and put into production in a few weeks or months. Air transport cannot. If normal competitive business considerations were to close down a part of the air transportation system, then there would be a swift melting-away of the managerial know-how, skilled flight personnel, trained mechanics, meteorologists, and other specialists. In a war emergency, all this organization and manpower could be put together again, it is true — but it could not be done in time to provide essential support for the initial crucial military defense and offense.

The question naturally occurs: if these planes and this organization are so essential to the military, why doesn't the Department of Defense build and maintain a fully adequate air transport support of its own? The answer is economic. The military have their own air transports — the Military Air Transport Service, the Fleet Logistics Air Wings, the transports of the Strategic Air Command and the Troop Carrier Command and other air transport organic to military organizations. But they do not have enough. Military funds, although huge in amount, are not unlimited. Other military shortages also have a high priority. The airlift portion is, like many other military resources, inadequate in time of peace for use in all-out war.[83]

It is much more economical to allocate to war uses a portion of the civil air fleet, if in peacetime the planes earmarked for the military can be operated at little or no governmental expense. The capital costs of new transport aircraft are almost the same for military or civil use. The annual operating costs per plane are somewhat lower for the military since, despite the fact that the hourly expenses may be some-

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[82] U. S. Department of Defense, *The Department of Defense Plan for the Civil Reserve Air Fleet* (Multilithed, 20 March, 1952).

U. S. Department of Commerce and Department of Defense, *Report to the Air Line Presidents on Civil Aviation Mobilization* (Multilithed, March 26, 1952).

[83] Statement of Felix E. Larkin, General Counsel, Department of Defense, U. S. Congress, Senate, Committee on Interstate and Foreign Commerce, *Prototype Aircraft Development* (Hearings, 81st Congress, 2nd Session. Washington: U. S. Government Printing Office, 1950), p. 32.

what higher, the total number of hours flown per plane is much lower. The great economy of the civil fleet lies in its commercial revenues which can largely or wholly offset the capital and operating costs.

Building a commercial air fleet for a ready military reserve produces a conflict in the objectives of a civil airline system, depending upon the size of the military reserve required. A considerable expansion of airlift capacity is an inherent potentiality of civil planes as they are normally operated in peacetime. The usual utilization can be raised 25 to 50 percent in wartime. The usual revenue load factor can be raised by about half in wartime.

But if more military reserve is required, policy conflicts develop. The CAB has taken the position that the development of civil air transportation must be along lines that are either economically feasible or that give promise of becoming so,[84] and that the establishment of a military reservoir of aircraft in excess of reasonable economic justification is not within the CAB's function.[85] The Department of Defense has stated that allocating mail pay subsidies for national defense purposes is not feasible; while commercial airlift is a national defense asset, its value is too intangible for such calculations.[86]

Some people would change the existing policy. Some would have the military accumulate a "moth ball" fleet of air transports. Some would have the military buy planes and lease them to the carriers at a low rental that would expand the use of the planes. Some would add more routes and more carriers with less economic justification.

These ideas have not been generally favored. But if a business depression came, and if competition worked itself out among the airlines as it has among free enterprises, with wholesales bankruptcies and a large proportion of the facilities made idle for long periods, then present policies might require change. The national defense interest might not be able to afford a major reduction in air transportation. And this interest is one more factor that sets this industry apart from the usual free enterprise industry.

Interpreting "Airline Competition"

"Competition" means many things to many people. It brings up one set of ideas to an economist, another to a court or lawyer, another to a practical businessman. It means one thing in the more competitive part of the American economy, another in the more monopolistic

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[84] Statement of the Civil Aeronautics Board. U. S. Congress, House, Committee on Interstate and Foreign Commerce, *Transportation Study* (Hearings, 81st Congress, 2nd Session. Washington: U. S. Government Printing Office, 1950), p. 27.

[85] U. S. Civil Aeronautics Board, *Transport Aircraft Production*, letter from the Chairman of the Civil Aeronautics Board in response to S. Res. 228, 77th Congress, 2nd Session (Senate Doc. No. 206. Washington: U. S. Government Printing Office, 1942), p. 3.

[86] Statement of Hon. Stephen Early, Deputy Secretary of Defense. U. S. Congress, Senate, Committee on Interstate and Foreign Commerce, *Air-Line Industry Investigation* (Hearings, 81st Congress, 1st Session. Washington: U. S. Government Printing Office, 1949-1950), pp. 2036-2037.

part, another in public utilities, and still another in the particular public utility of air transportation. Within each of these major groups it may mean several things to different people as it does in air transportation.

The Civil Aeronautics Act, in its Declaration of Policy, states that the public interest requires "Competition to the extent necessary to assure the sound development of an air-transportation system. . . ."

In itself, this phrase means nothing. The extent of competition necessary for sound development can be considered by various people in the complete range from zero to complete duplication and triplication of every route, or even to the complete removal of all certificate requirements from the Act. Its real significance is that competition is mentioned at all.

Interpretation of competition is also complicated by the fact that the Declaration of Policy contains other objectives which may basically be in conflict with the competition clause: encouragement and development of an air transportation system; regulation to promote its development, preserve its inherent advantages, and foster sound economic conditions; and the promotion of economical service.[87]

What is the competition mentioned in the Act? The narrowest definition is probably that developed by the CAB. In the Board's interpretation, competition usually means direct parallel point-to-point service by two or more airlines that can potentially provide fairly substitutable transportation in terms of aircraft and schedules.

But there are other possible interpretations of what is meant by competition, on a slowly broadening scale. It could mean direct competition between major terminals, but via different intermediate areas: this type was important back in 1938, but has become quite obsolete with the advent of newer aircraft capable of making long nonstop flights. Or competition could mean service between the same approximate areas, but not necessarily between the same cities — for example, coast-to-coast, but not necessarily Boston-San Francisco or Washington-Los Angeles. Or it could even be broadened a little further, as is done in other transportation media, to markets which are competitive in type rather than in geographical location — as vacation trips to Florida vs. Carlsbad Caverns vs. Yellowstone Park vs. Niagara Falls.

Or it can mean the competitive spirit, as described by the Federal Aviation Commission in 1935:

> "There has been little direct point to point competition on identical routes, and what has existed has been comparatively unimportant. Of much greater benefit has been the availability of two or more alternative routes . . . between widely separated centers. . . . Perhaps of even greater importance, however, is the spirit of emulation that exists even between organizations that could not by any conceivable possibility be in direct competition with each other."[88]

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[87] Civil Aeronautics Act of 1938, as amended, Sec. 2.

[88] U. S. Congress, Senate, *Report of the Federal Aviation Commission* (Senate Doc. No. 15, 74th Congress, 1st Session. Washington: U. S. Government Printing Office, 1935), pp. 61-62.

Of course, the statement that direct point-to-point competition was comparatively unimportant, if true at the time, was certainly not true a few years later. In 1940, 25 percent of the airline passenger travel was in markets served directly by two carriers, and 16 percent was in markets served by three carriers.[89] It was also true, in the language of technical economists if not in the minds of practical legislators, that the industry was not one of competition, but of monopolies, duopolies, and oligopolies.

The fact that such a large proportion of traffic was in competitive markets — assuming that practical men might well think that if two or three carriers serve a market it is "competitive" — may have also been a strong reason for the clause in the Act. The "grandfather" clause solidifying the existing route structure may have had to recognize this as a basic element of the existing air transportation system.

Then again, broadening out still further, does competition have to mean rivalry by means of exactly the same type of service? One of the important conclusions reached by Gill and Bates is the very close relation of air fares to first-class rail fares, and the strong influence on air service of rail service.[90] It is clear that the transportation net works of the country are highly developed and offer severe competition in convenience and in schedule frequency; that bus and rail service make the volume of air travel negligible at distances under about 100 miles; that overnight rail service is highly competitive up to distances of 400 or 500 miles; and that rail service is still a major competitive factor at greater distances. Travel by private car, which vastly exceeds passenger travel by all common carriers, is also competitive. It seems obvious that competition for an airline need not necessarily be furnished only by other airlines. However, this factor was probably not of any great influence in writing the provisions of the Act.

The definition of competition must also be tightly limited by the public utility idea. The Civil Aeronautics Act was closely patterned on other public utility regulations, particularly upon the Act which created the Interstate Commerce Commission in 1887 to regulate railroad rates and service, and was broadened to regulate pipelines in 1906, motor carriers in 1935, and water carriers in 1940.[91]

It is unfortunate that the words "competition" and "monopoly" have to be used in dealing with air transportation. They drag in too many irrelevant emotions and ideas. Yet the words are used by everyone in speaking of this industry, and in order to remain intelligible the same words must be used in this analysis. It would be far better to standardize on some such hieroglyphics as HOMTOPARCUCABR, "holders of more than one parallel air route certificate under CAB regulation," and HOASUARCUCABR, "holder of a single unparal-

[89] Frederick W. Gill and Gilbert L. Bates, *Airline Competition* (Boston: Harvard University Printing Office, 1949), p. 27.

[90] *Ibid.*, p. 433.

[91] U. S. Commission on Organization of the Executive Branch of the Government, *Task Force Report on Regulatory Commissions* (Appendix N) (Washington: U. S. Government Printing Office, 1949), p. 7.

leled air route certificate under CAB regulation." These hieroglyphics are accurate, but clumsy. They are what are generally meant by "competition" and "monopoly" among the domestic airlines of the United States.

What Can Be Done to Reduce Airline Competition?

Suppose that it were generally agreed — by the CAB, Congress, government and industry generally — that there is too much competition among the domestic airlines. What could be done under the Civil Aeronautics Act to reduce it? What could be done by amending the Act?

Under present conditions, of course, there seems little likelihood of such a conclusion being reached. For one thing, few people realize how much airline competition is costing the country. For another, most people have been steeped in the traditions of the free enterprise system, and relatively uninformed on how far removed from it are the regulated public utilities; cries of "monopoly" would arouse in them all the emotions rightfully applicable to the economy in general, but not to the air transportation industry in particular. As for the airlines, they share the opinion of most businessmen, that reduction in competition is laudable when made at the expense of their competitors, but that it is most objectionable when they are the ones to be ejected from someone else's territory.

But there is one set of conditions which would probably force agreement to such a program. These conditions have not occurred in this country for more than twenty years, and no one knows when they might happen. They are the conditions of a major business recession or depression. With all economic activity declining, business and pleasure travel by air would drop rapidly, taking with them the airlines' commercial revenues. Government tax collections would also go down which would normally produce a drive to cut Government expenses — as could happen without a depression — and the subsidy constituting the government guarantee of airline solvency might be slashed drastically.

The airlines would then have a choice between major retrenchment and bankruptcy. Like most other businessmen under compulsion of these unpleasant alternatives, they would probably choose retrenchment even if it meant a major amputation of routes. The government regulatory agencies would have the choice between a plan for reduction and the chaos of uncoordinated cuts. The CAB, if it had time, would probably choose a planned reduction.

A number of possible methods are available to reduce airline competition. Some have been suggested in the past for helping cure whatever was believed to be wrong with the airline route pattern, and some have not. Some are purely voluntary on the part of the airlines, and some could be imposed by the CAB only over airline opposition. Some powers conferred under the Civil Aeronautics Act have been

used, and some have not. Some methods would require changes in the Act.

Route Planning

Route planning has been favored, and lack of route planning has been criticized by a large number of authorities in the aviation field: the President's Air Policy Commission,[92] the Congressional Aviation Policy Board,[93] a task force of the U. S. Commission on Organization of the Executive Branch of the Government (Hoover Commission),[94] the Department of Commerce,[95] a number of airline presidents, and others.

"Route planning" means all things to all men. Although it means arriving at some fixed conclusions about the most important policies in air transportation, that is where agreement ends. When it comes to embodying specific policies in a specific plan, the planners are for or against the plan depending upon whose ideas it embodies.

Route planning is a complex task. Competition is only one of the problems to be settled. Other problems with important effects on the air transportation system include the relative economic strengths of the planned airlines, the limits in size of towns and density of routes to be served, the size and use of direct and indirect subsidies, and the general level and structure of fares.

Route planning has many advantages when the control agency must take action, planned or unplanned, and the only real choice is whether the decisions will follow a consistent pattern or not. The Hoover Commission task force report said that:

> the opinions of the Board in individual route cases do not reveal a consistent set of principles. The Board's case-by-case judicial procedure, without basic planning, leaves much to be desired as a method for directing the growth of a Nation-wide route pattern.[96]

It then went on to recommend studies and analyses on

> . . . the proper number of trunk-line carriers, the extent of competition, the economics of feeder-line service, the optimum size of air-line systems, classification of services, frequencies of schedules, and the principles to govern one-carrier, single-plane and skip-stop service.[97]

One former CAB chairman believes that an overall national plan puts the cart before the horse.[98] He believes that planning should

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[92] U. S. President's Air Policy Commission, *Survival in the Air Age* (Washington: U. S. Government Printing Office, 1948), pp. 110-111.

[93] U. S. Congress, Congressional Aviation Policy Board, *National Aviation Policy*, p. 26.

[94] U. S. Commission on Organization of the Executive Branch of the Government, *op. cit.*, p. 78.

[95] W. Averell Harriman, Secretary of Commerce, *Statement to the President's Air Policy Commission* (mimeographed, November 26, 1947), p. 18.

[96] U. S. Commission on Organization of the Executive Branch of the Government, *loc. cit.*

[97] *Ibid.*

[98] James M. Landis "Air Routes Under the Civil Aeronautics Act," 15 JRL. OF AIR LAW & COM. 299 (Summer, 1948).

center around the specific airline system, and should proceed with individual airline expansions or contractions or mergers in view of available traffic resources. He believes that the weaknesses of the present system are mainly those of inherently weak routes and of the integration of routes into weak airline systems,[99] without mention of the fact that competition contributes to the weaknesses.

Another former CAB chairman believes that there are only about three types of competitive situations to be corrected.[100] One is where a weaker carrier has been given a route directly paralleling the route of a stronger carrier with whose schedules he cannot compete. Another is where a small carrier competes over a dense but short route segment where the short hauls make profitable operation almost impossible when coupled with heavy competition. The other is where there are just too many competitors, which instances number only about three.

These are only two views on how to attack the route planning problem. Others would be brought out by further investigation. As a matter of fact, airline difficulties produce many investigations. The recent airline recession beginning in 1947 started a series. The President's Air Policy Commission began late in the year, followed soon by the Congressional Air Policy Board. In 1948 the Hoover Commission, which was investigating the organization of the government, studied the CAB's organization and procedures. In the next year, the Senate Interstate and Foreign Commerce Committee held hearings which produced a record of more than 2500 printed pages. The CAB began several investigations of its own into specific instances of possibly excessive competition. It directed its staff to prepare a comprehensive and complete analysis of the domestic route pattern,[101] which finally became a study of cost standards by which to measure route changes.[102]

Fortunately for the airlines, government subsidies were available for the period of the brief airline recession, business soon picked up, and the Korean war shot the airlines up into unprecedented profits. Nothing very important came of the investigations.

If another recession should be general throughout the American economy and not just local to air transportation, and if it should last a fairly long time, something would have to happen. For that time, it would be well for the airlines and the government agencies to be aware of the real cost of airline competition, and have ready an outline plan of how to reduce it. Then the investigations might well center upon such a plan, and they might result in specific action to realign the air route pattern.

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[99] *Ibid.*, p. 295.

[100] Joseph J. O'Connell, Jr., "Legal Problems in Revising the Air Route Pattern," 15 JRL. OF AIR LAW & COM. 400 (Autumn, 1948).

[101] U. S. Civil Aeronautics Board, *Annual Report*, 1948 (Washington: U. S. Government Printing Office, 1949), p. 4.

[102] F. H. Crozier, *Cost Standards—Domestic Scheduled Air Carriers* (Washington: U. S. Government Printing Office, 1950).

Route Suspension, Revocation, or Purchase

There are three methods by which the CAB can eliminate routes from a carrier's operation, and thereby eliminate competition — suspension, revocation, and purchase. The first of these, route suspension, is authorized by the Act. Another, route revocation, is not possible under the Act except under very unlikely conditions, and cannot be exercised if its only justification is that the public convenience and necessity no longer require the operation. Of course, if a carrier requests suspension or revocation on its own initiative, the CAB could approve it, but this action is unlikely in the highly competitive situations where it is most needed. The third method, route purchase, would probably require special Congressional action.

Many people oppose the granting to the CAB of power to revoke certificates, and oppose the exercise of the power to suspend certificates as a long step on the road toward revocation. They believe that such power would destroy the stability of an industry founded upon permanent certificates. They feel that the industry could not plan ahead with any sense of security, that the certificate would become a temporary permit rather than a permanent right, and that investment funds would be much more difficult to obtain and would be at a much higher price.

On the other hand, many people feel that permanent certificates have some major disadvantages. They are granted for the reason that the public convenience and necessity are believed to require them; if the need for them changes, or if their results are uneconomic, there should be some way to change the route pattern. Their continuation can be costly to the Government which is permanently pledged to keep the certificated routes financially sound; their continuation can be costly to the public in higher fares based on higher costs.

The power of revocation need not be permanently granted to the CAB. Under the pressure of a major business recession, and for a limited period, it might be granted as an alternative to complete unplanned bankruptcy and chaos.

The CAB has suspension powers now, under Section 401 (h) of the Act.[103] The CAB has interpreted its powers as meaning the right to suspend for an indefinite time, with only a fine legal distinction between suspension and revocation:

> Those who argue that the Board is without authority to suspend the entire certificate . . . first contend that a suspension as proposed herein is not really a suspension but a revocation or an abandonment. Although from the standpoint of potential users of service the end result of abandonment, suspension, or revocation may be exactly the same, i.e., loss of service, these three are not necessarily the same. Abandonment and revocation both have the attribute of

[103] "The Authority, upon petition or complaint or upon its own initiative, after notice and hearing, may alter, amend, modify, or suspend any such certificate, in whole or in part, if the public convenience and necessity so require."

> **finality, while suspension permits possible return to the original status . . .[104]**

As for the fact that suspension need not specify a fixed time after which it would cease to be effective, the CAB said:

> **The exact time at which we should order the suspension to be ended cannot and need not be specified at this time. The determination that the public convenience and necessity require suspension is based on facts which are subject to change. . . . The suspension should continue as long as the factors presently requiring such suspension remain substantially unchanged, and should be terminated whenever it is demonstrated to the Board that circumstances have changed in such manner that suspension of all or part of the certificate is no longer required by the public convenience and necessity.[105]**

This decision was not tested in the courts, since concurrently with the suspension the carrier in the case was granted another certificate. Where a major route would be suspended, a court fight might result.

During the recent airline recession, the CAB took specific action toward possible suspension of competitive routes. In its Economic Program of 1949, the CAB instituted three route segment investigations, one for Washington-Detroit-Twin Cities, one for Washington-Chicago, and one for New York-Detroit.[106] Concerning these investigations, the CAB said that they were designed to lessen excessive competition and bring about a more rational corporate and route structure in the industry, and that since the industry was generally unwilling to suspend on a voluntary basis, the CAB would devote increasing attention to such actions.[107] Only the first of these cases went to hearing, and in the middle of 1952 the CAB dismissed the proceeding.[108]

The CAB also started other actions which might have resulted in route suspensions. In March and April 1947, it issued orders instituting investigations of the finances, routes, and operations of five airlines. The carriers filed special reports, and the CAB staff made field studies of the carriers. But the CAB then found itself faced with mail rate cases necessary to keep the carriers solvent, and diverted its staff from the investigations to the rate cases. The reports became out-of-date, and economic conditions improved. All the investigations were finally dismissed.[109]

The present power of the CAB to revoke certificates is extremely limited under the Act. It can be exercised only when a carrier inten-

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[104] 10 CAB 24, All American Airways, Inc., Suspension Case, decided January 11, 1949, p. 27.

[105] *Ibid.*, p. 35.

[106] CAB Orders E-2480, E-2481, and E-2482, February 21, 1949.

[107] U. S. Civil Aeronautics Board, *Annual Report*, 1949 (Washington: U. S. Government Printing Office, 1950), p. 5.

[108] CAB Order E-6604, Through Service Investigation Twin Cities-Washington-Detroit-Washington, decided July 14, 1952.

[109] Chicago and Southern case closed by CAB Order E-1783, July 12, 1948, Capital and Colonial cases closed by 11 CAB 307, May 29, 1950; Western case closed by CAB Order E-5292, April 16, 1951; Northeast case closed by CAB Order E-6026, January 11, 1952.

tionally fails to comply with an order of the CAB and continues its failure to comply after the CAB issues an order commanding obedience.[110] Such action seems to be most unlikely.

Opinions differ on the advisability of the power to revoke certificates. In its statement before the President's Air Policy Commission in October 1947, the CAB said:

> It is the opinion of the Board that the Act should be amended so as to rest in the Board authority to revoke existing certificates in any case in which the public convenience and necessity require such action. Experience under the Act has convinced the Board that the existing airline route pattern is in some respects not well adapted to the development of an adequate air transportation system, and that if such a system is to be assured some realignment of the existing route pattern of the certificated carriers is essential. . . .
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> * * *
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> Inevitably some of the awards made by the Board, on the basis of available historical data and estimates, will prove to be uneconomic and unwise in the light of actual operations. Moreover, some of these cases which in retrospect appear to have been sound decisions on the basis of conditions existing at the time may prove to be of questionable wisdom because of subsequent changes in the technology of air transportation and general business conditions.[111]

Evidently there was no unanimity of opinion, even in the CAB. The chairman said later, when he was longer with the CAB:

> My own view is that, since public convenience and necessity was the basis for the issuance of a certificate, the absence of public convenience and necessity should be ground for its termination. But this view was opposed by my colleagues and found no favor with the President's Air Policy Commission.[112]

The incoming chairman of the CAB also disagreed with this previous position:

> At least until we have found that the other tools which we possess are inadequate to do the kind of realignment of the route structure which must be done, I am not personally disposed to request the Congress for power to revoke a certificate other than for cause. But I would not be bashful about requesting the power because of any theories which may exist with respect to the sanctity in perpetuity of a certificate of public convenience and necessity.[113]

He later testified to the same opinion before a Senate committee, and

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[110] "The Authority, upon petition or complaint or upon its own initiative, after notice and hearing, may . . . revoke any such certificate, in whole or in part, for intentional failure to comply with any provision of this title or any order, rule, or regulation issued hereunder or any term, condition, or limitation of such certificate; *Provided*, that no such certificate shall be revoked unless the holder thereof fails to comply, within a reasonable time to be fixed by the Authority, with an order of the Authority commanding obedience to the provision, or to the order (other than an order issued in accordance with this proviso), rule, regulation, term, condition, or limitation found by the Authority to have been violated." (Section 401h of the Civil Aeronautics Act of 1938, as amended.)

[111] U. S. Civil Aeronautics Board, *Statement of Civil Aeronautics Board Before the President's Air Policy Commission*, October 27, 1947, pp. 203-205.

[112] James M. Landis, *op. cit.*, p. 297.

[113] Joseph J. O'Connell, Jr., *op. cit.*, p. 405.

said that in doing so "I am sure I express the feeling of the Board. . . ."[114]

Another way of readjustment of the route pattern by eliminating routes, possible under the existing Act but not probable except with specific appropriations beforehand by Congress, is for the CAB to buy out route certificates. This was suggested by a preliminary study made for the Senate Committee on Interstate and Foreign Commerce.[115] The principle underlying this suggestion is that the government would be better off if it made a single and final payment for an uneconomic route and closed it down, rather than to continue to support it indefinitely through mail payments.

Suppose, for example — and this carrier is selected only as illustrative of a number of company situations and not as a specific recommendation — that Capital Airlines' entire operation were under consideration. For the five-year period 1947-1951, mail payments to this carrier aggregated over $17,500,000. About 6,100,000 ton-miles of mail were carried; at a service rate of 45 cents per ton-mile this would have cost the government $2,750,000; at 53 cents per ton-mile, it would have cost $3,250,000; at 75 cents, it would have cost $4,500,000. The airline's 1951 service mail rate was 53 cents; the service rate of most of its competitors in the same year was 45 cents. Undoubtedly the service rate for the earlier years would have been higher, but it is doubtful that if the mail had been routed via competitors for the entire period, the rate would have exceeded 75 cents. The net subsidy cost to the government of this carrier for the five-year period, then, was at least $13,000,000.

The net worth of the company, using the average at the end of each of the five years, was $2,140,000. The five-year subsidy was therefore sufficient to buy out the net worth of the company more than six times. The average depreciated cost of property and equipment, without counting any offsetting liabilities, was about $8,650,000 for the period. The subsidy mail payment was therefore sufficient to buy the entire physical plant of the company one and one-half times. Obviously, it would have paid the government, purely on a cash basis and disregarding all other considerations, to purchase the company and close up its routes, even at a considerably inflated price.

Many of the airlines would show a similar result for the same period. If the process were broken down more finely, to deal only with particular routes, the results would be similar. Of course, this one illustration includes many light-traffic routes which run at heavy defi-

[114] Testimony of Joseph J. O'Connell, Jr., Chairman, CAB. U. S. Congress, Senate, Committee on Interstate and Foreign Commerce, *Air-Line Industry Investigation*, p. 58.

[115] "Ernst & Ernst Pilot Study, setting forth methods of compensation for carriage of domestic air mail for the operation of air transportation service essential to the public interest." Letter of January 18, 1950, from Ernst & Ernst to Hon. Edwin C. Johnson, Chairman, Committee on Interstate and Foreign Commerce. *Air-Line Industry Investigation*, pp. 2167-2168.

cits, but the principle is clear even for competitive routes which are usually of high traffic density.

The problem of a fair price to be paid would be a great one. There is the argument that, since the government granted the certificate as a gift, no purchaser of the route should be required to pay for the franchise value. There is the opposing argument that, if sales of routes are to be made voluntarily, there must be the incentive of a profit over the value of the physical property sold.

The CAB and its individual members have varied on these questions. In the first formal case that came before the Board in 1940, the Board disapproved the purchase on the basis of price, stating that it was clearly adverse to the public interest to allow a certificate to be sold to the highest bidder as if it were a speculative security.[116] Half a year later, the CAB approved the purchase, justifying a price for the exchange of property greater than the value for rate-making purposes.[117]

In the next major case with the issue of price, in 1947, the CAB held that a commercial profit on the sale of a route was justified as an incentive to improve the route pattern. The CAB held that this inducement was in line with the economic laws and business motives of a free economy, that there was no direct or indirect means of forcing a carrier to transfer its route against its will, and that trying to pressure a carrier by indirect means would be one of the gravest mistakes the Board could make.[118] The chairman dissented, stating that such approval was an invitation to carriers to wait for the highest bidder and that the public would inevitably pay for the inflated price; he believed that the price should be a basis for charging a lack of economy that would justify a reduction in government subsidy payments.[119]

Most recently, in 1950, the Board in effect reversed its 1947 stand. In 1947 it had allowed a subsidy-rate carrier to sell a route at more than its physical property value. But then in the subsequent mail rate case it counted the profit from the route sale as an offset against subsidy need, so that the profit accrued not to the carrier but to the government. It repeated the pre-1947 arguments that route changes should not be conditioned on profitable route sales, and that such a ruling should not prevent a carrier from making a route sale.[120] Six months later, however, the CAB again reversed its position, and held that the carrier should be allowed to keep the net profit from the sale of the intangibles "which the Board found to be composed almost entirely of the earning power of the route, because it was the latter factor which played the decisive part in the route transfer," and in so doing the Board stated that it was "thus seeking to encourage improvement of

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[116] 2 CAB 1, Acquisition of Marquette by TWA, decided July 3, 1940, p. 14.

[117] 2 CAB 409, Acquisition of Marquette by TWA, Supplemental Opinions, decided December 18, 1940, p. 412.

[118] 8 CAB 298, United Air Lines, Inc.-Western Air Lines, Inc., Acquisition of Air Carrier Property, decided August 25, 1947, p. 323.

[119] *Ibid.*, Dissent of James M. Landis, pp. 341-342.

[120] CAB Order E-4870, Western Air Lines, Inc. and Inland Air Lines, Inc. Mail Rates, decided November 24, 1950, pp. 17-18.

the air route pattern through voluntary route transfers by other carriers."[121]

As a matter of standard public utility regulation, allowing profits on route transfers has arguments on both sides. It would seem to be a practical approach, especially in time of general business recession, for the CAB to offer to purchase competitive routes which otherwise would cost the Government far more in a few years of subsidy payments. It would also seem advisable for the carriers to sell at a reasonable figure, particularly if there were imminent threat of mail payments disappearing under the Congressional axe.

A major realignment of the air route structure of the United States, through a major program of route revocations, need not necessarily result in a reduction in the total number of carriers. It would normally be based upon the concept of producing a system of regional monopolies rather than a system composed of only a few carriers or a single giant company. Of course, at the same time there might also be a change in the number of carriers, but such action would be based upon considerations other than competition.

The net result, if all other things remained the same, would be to retain the gross traffic volume of each carrier, although such an outcome could not be achieved exactly for every carrier. Each would have its route mileage reduced. The density of traffic would therefore increase proportionately. It is the rise in this factor which would be most favorable to the economic condition of any carrier.

Interchange

An equipment interchange is an agreement between two or more carriers by which the plane of one carrier can continue on a through flight over the routes of the others. In all cases, full operational control and responsibility pass to the carrier over whose route the plane is flying.[122]

Ordinarily, each carrier provides planes in approximate proportion to the mileage flown over its own routes. However, one carrier can provide all the planes and the other may merely lease them, or one carrier can provide the planes for a period of time alternately with the other carrier. There is no necessary requirement as to the percentage of contribution of each.

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[121] CAB Order E-5467, Opinion and order disposing of exceptions in Western Air Lines, Inc. and Inland Air Lines, Inc. Mail Rates, decided June 26, 1951, pp. 8, 9.

[122] A typical contract provides that the carrier with the route certificate will have:

"responsibility for operation, dispatch, flight plane clearance, radio plane guard, and 'in-flight' instructions, and all communications, navigation, and weather facilities and services, and also for loading and discharge of airplanes, handling of traffic and passenger service . . . establish schedules . . . inspect aircraft . . . crews will be qualified and included under the operations specifications . . . and will utilize . . . route manual, operations manual and aircraft manual . . . authority to cancel a flight, turn it back, delay or reroute it for operational reasons."

(8 CAB 50, Pan American-Panagra Agreement, decided May 5, 1947, pp. 53-54.

Usually, each carrier provides its own crews for flight over its own routes, and the crews change at the route junction point. However, one carrier can provide all the crews just as it may provide all the planes, and in effect charter a number of regularly scheduled trips to the other.

Revenues and expenses are usually charged to each carrier separately, with the lessee keeping all revenues from traffic moving over its own routes, and paying the lessor a price per plane-mile by a method specified in a contract. However, any sort of formula can be agreed upon for dividing revenues and expenses in any sort of reasonable ratios.

The first interchange approved was in 1940 between United and Western, so that transcontinental sleeper planes could continue on the routes of both carriers without disturbing passengers for change of planes at the route junction point. This interchange operated until the sleeper planes were requisitioned for military service during the war.

The first postwar domestic interchange was authorized at the end of 1947, and by the end of 1953, 9 carriers were operating 19 daily interchange round trips serving 51 cities.[123]

Interchanges have practically all the advantages of new route certifications, and few of the disadvantages. They provide the public with through service that can be increased or decreased as the traffic warrants. They add negligibly to costs other than those usually incurred by increases in flight frequencies and traffic, because there are no more new stations opened by more carriers, no additional flight costs other than route familiarization, and very little additional crew training if the type of aircraft is one already flown by each participating carrier.

The use of interchanges could have prevented a large amount of duplication in the route structure of the airlines. Several people have said that if interchanges had been used on a wider scale earlier, the routes would today be much stronger.[124] Of course, as long as the CAB was granting duplicate new routes, the carriers trying to expand into another's area stressed the advantages of new route grants, and kept away from any suggestion of interchange.

It is now recognized that interchanges can be an important means of avoiding more competition in the future. The CAB has called this the most promising alternative to the granting of new route mileage.[125] One former CAB chairman has said that interchanges could help solve the problem of a weak carrier paralleled by a short route of a large carrier,[126] and another has said that "the real possibilities for improved air service in the next decade lie less in the extension of routes than in the development of combined through services."[127]

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[123] *Official Airline Guide*, December 1953.

[124] C. R. Smith, President, American Airlines and Senator Edwin C. Johnson. *Air-Line Industry Investigation*, pp. 785, 2157.

[125] Statement of the CAB. U. S. Congress, House, Committee on Interstate and Foreign Commerce, *Transportation Study*, p. 19.

[126] Joseph J. O'Connell, Jr., *op. cit.*, pp. 406-407.

[127] James M. Landis, *Mutual Problems on Air Transport Service*, an address before a General Session of the American Municipal Association (New Orleans: mimeographed, November 6, 1947), p. 5.

Almost all the thinking about interchanges in relation to competition has been quite negative. Interchanges have been thought of as a means for slowing down the increase in competition. They have not been thought of, generally, as a way to reduce competition in combination with other measures.

Suppose, for example, that the CAB had found in the Twin Cities-Washington through service investigation — as it did not — that the point-to-point parallel competition of Northwest and Capital was uneconomic on the route Minneapolis-Milwaukee-Detroit-Cleveland-Pittsburgh-Washington. In that proceeding Public Counsel exhibits showed that the competition between the two airlines cost in the neighborhood of $2,000,000 for the two subsidy carriers during the twelve months ended September 30, 1949.[128] The CAB could have suspended Capital north of Detroit and Northwest south of Detroit, left the public with adequate through service via an interchange between the two carriers at Detroit, and in one single proceeding have saved the public some two million dollars in mail pay per year.

If used in connection with some other power, such as suspension or revocation or purchase of route certificates, interchanges could be an effective help in eliminating the costs of competition without lessening public convenience.

It should be noted that the CAB has the power to compel interchanges. Section 404 (a) of the Civil Aeronautics Act provides that

> "It shall be the duty of every air carrier . . . to provide reasonable through service in such air transportation in connection with other air carriers; to provide safe and adequate service, equipment, and facilities in connection with such transportation."

Consolidation and Route Transfer

Consolidations and route transfers have frequently been mentioned as major methods of changing the airline route structure. This section is not meant to be an exhaustive study of the consolidation and merger problem, but analyzes it only as far as such methods might or might not be suitable to reduce airline competition.

Perhaps it might be well to start with a brief review of another transportation industry which has had a fairly long history of the consolidation problem — the railroads. Although the railroad and airline systems are by no means comparable, a case study of the one throws considerable light on the other.

The Transportation Act of 1920 required that the Interstate Commerce Commission prepare a complete plan for the consolidation of the railroads in a limited number of systems.[129] In doing so, the ICC was to preserve competition as much as possible, maintain existing routes and channels of trade where practicable, and produce railroad

[128] CAB Docket No. 3661, Exhibit P. C. Reb. 1 (Revised).

[129] This and the following paragraph are based on Marvin L. Fair and Ernest W. Williams, Jr., *Economics of Transportation* (New York: Harper & Brothers, 1950), pp. 659-660.

systems that if possible could earn approximately equal rates of return at a uniform system of rates.

A report was made in 1921 recommending consolidation of all railroads into nineteen systems. There were extensive hearings, and in 1929 the ICC finally approved a plan for twenty-one systems. Then came the depression, and little was done toward consolidations in line with the approved plan. In 1940 Congress passed the Transportation Act of 1940 which abandoned the idea of requiring consolidations to fit into an overall plan of the ICC.

The major objectives of consolidation were to replace many weak lines with fewer systems of fairly equal competitive strength, and to improve the entire system by operating economies. Mergers would eliminate the problem of weak and strong lines; otherwise, if weak lines were retained, rates sufficient to maintain them would produce excessive profits for the stronger lines; rates low enough to produce reasonable returns for the stronger lines would bankrupt the weaker ones. Operating economies were believed to include the reduction of overhead expenses, elimination of circuitous routings, greater utilization, better seasonal protection, greater standardization, savings in quantity purchases, higher load factors, simplification of regulation, and improvement of railroad credit and the market for securities.[130] A study made of railways in 1933 estimated that a reduction in costs of 68 million dollars could be made solely through the elimination of competitive passenger limited trains, converting a deficit of 41 million dollars to a profit of 27 million dollars.[131]

The failure of the railroad consolidation plan has been attributed by various people to various things. One is that the plan had to conform to the impractical conditions of preserving competition, creating systems of equal strength, and maintaining traffic in existing channels. Another is that a small number of regional systems is inferior to a large number of competitive systems. Another is that the general plan could not possibly conform to the ambitions of various carriers and the personal interests of their managements. Another is that the plan was voluntary rather than compulsory.

The idea of airline mergers is not new; there is a fairly long history of such cases. The CAB has stated what it considers to be among the principal factors in determining whether a merger or consolidation is in the public interest: Will it "result in an integrated and coordinated system adapted to a normal flow of air traffic?" Will it "facilitate more economical and efficient services?" Will it "result in creating a monopoly and thereby result in restraining competition or jeopardize another air carrier?"[132]

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[130] Association of American Railroads, Railroad Committee for the Study of Transportation, *Consolidation of Railroads* (Washington: Association of American Railroads, 1945), pp. 2-3.

[131] U. S. Federal Coordinator of Transportation, Section of Transportation Service, *Passenger Traffic Report* (Washington: U. S. Federal Coordinator of Transportation, 1935), p. 82.

[132] 11 CAB 33, Monarch-Challenger Merger Case, decided November 16, 1949, p. 35.

In practice, the CAB seems to have given primary attention only to the last of these. Its principles seem to have been to prevent large carriers from becoming larger except for very minor additions, to encourage small and medium-sized carriers to merge so as to make larger but fewer systems, and to give only secondary considerations to physical integration and operating economies.

There have been three major cases involving mergers of large carriers which would reduce competition. The first was the initial United-Western merger case, in which a transcontinental with entry into three of the four large west coast cities wanted access to the fourth when no other carrier had entry to more than two; the CAB disapproved, stating that "Such an increase in the size and control of United in this large area would adversely affect the existing competitive opportunities for Western business. . . ."[133] In the Alaska-Cordova case, the CAB disapproved because Alaska Airlines "which already has access to all of Interior Alaska except the Copper River district would further increase that carrier's overwhelming competitive advantage in the territory. . . ."[134] In the American-Mid-Continent case, the CAB found that there was no integration of traffic flows, and that the merger would divert excessive traffic "and would impair the competition we deem requisite to assure the development and maintenance of an adequate air transportation system"[135] thereby making the largest airline in the country still larger.

The CAB has approved of small additions to large carriers, as in the TWA-Marquette case where a large transcontinental line absorbed a small one to obtain entry into Detroit,[136] and the United-Catalina case where another large transcontinental acquired a lease for operating into Catalina Island about 30 miles off the California coast.[137] It has generally approved of merging local service lines such as in the Monarch-Challenger case,[138] Arizona-Monarch case,[139] and West Coast-Empire case,[140] this latter one after disapproving one of the carriers merging with another local service carrier in the West Coast-Southwest case.[141] It has also approved of the merging of small or medium-sized

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[133] 1 CAA 739, United Air Lines Transport Corporation—Acquisition of Western Air Express Corporation, decided June 19, 1940, p. 746.

[134] 4 CAB 708, Acquisition of Cordova Air Service, Inc., by Alaska Airlines, Inc., decided June 27, 1944, p. 712.

[135] 7 CAB 365, American Airlines, Inc., Acquisition of Control of Mid-Continent Airlines, Inc., decided September 27, 1946, p. 379.

[136] 2 CAB 409, Acquisition of Marquette by TWA, Supplemental Opinions, decided December 18, 1940.

[137] 6 CAB 1041, United Air Lines, Operation of Catalina Air Transport, decided June 3, 1946.

[138] 11 CAB 33, Monarch-Challenger Merger case, decided December 16, 1949.

[139] 11 CAB 246, Arizona-Monarch Merger Case, decided April 10, 1950.

[140] CAB Order E-6550, West Coast-Empire Merger Case, decided June 27, 1952.

[141] CAB Order E-5594, Southwest-West Coast Merger Case, decided August 7, 1951.

lines, such as Western-Inland,[142] Northeast-Mayflower,[143] Braniff-Mid-Continent,[144] and Delta-C & S.[145]

The principle of physical integration of operations and of traffic flows has been quite secondary, and inconsistently applied. The CAB approved the Western-Inland merger, even though it said the system would not produce a "geographically integrated corporate pattern."[146] It pointed out that Northeast and Mayflower interchanged passengers at Boston.[147] Then it disapproved a proposed National-Caribbean-Atlantic merger, partly because of price and partly because of ". . . no fusion of physical properties in a contiguous area . . . no development of an integrated and coordinated air transportation system."[148] Part of the reason given for disapproving the American-Mid-Continent acquisition was that there was no integration of traffic flows. In approving of the first feeder merger, the Monarch-Challenger case, the CAB gave as one of its three principal criteria, the condition that a merger should result in an integrated and coordinated system adapted to a normal flow of air traffic, and then in the next feeder merger case, Arizona-Monarch, it said that because these two carriers were feeders, "under these circumstances it is not essential that the routes of two companies be complementary."[149]

Route transfers have been few. The outstanding one was the transfer of Western's Los Angeles-Denver route to United to give that transcontinental its long-desired direct entry into Los Angeles, and the transfer from TWA to the local service line Bonanza of a small route of local service character.[150]

In only one case did the CAB propose to break up an entire system and redistribute its routes among other carriers. At the time of the CAB's proposed order in September 1948, National Airlines was in poor financial condition. It had just gone through the airline recession, had its new DC-6's grounded, and had a long pilot's strike. The CAB began an investigation to determine whether the carrier should be "dismembered," by transferring its main east coast route to Pan American, its local Florida-New Orleans route to Delta, and its Havana and Key West route to Eastern and Delta. After the investigation was ordered, the airline recession ended, the DC-6's were flying again, and the strike ceased. Soon the carrier was on the upgrade; in 1950 it earned a net operating income before taxes of $2,470,000 (including

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[142] 4 CAB 654, Western Air Lines, Inc., Acquisition of Inland Air Lines, Inc., May 23, 1944.

[143] 4 CAB 680 Acquisition of Mayflower Airlines, Inc., by Northeast Airlines, Inc., decided June 12, 1944.

[144] CAB Order E-6459, Braniff-Mid-Continent Merger Case, decided May 26, 1952.

[145] CAB Order E-7052, Delta-Chicago & Southern Merger Case, decided December 24, 1952.

[146] 4 CAB 654, p. 661.

[147] 4 CAB 680, p. 684.

[148] 6 CAB 671, National-Carribbean-Atlantic Control Case, decided March 1, 1946, p. 676.

[149] 11 CAB 246, p. 247.

[150] 10 CAB 893, Bonanza Air Lines, Inc.-Transcontinental and Western Air, Inc., Route Authorization Transfer, decided November 10, 1949.

mail pay of $1,748,000) and in 1951 it earned a net operating income before taxes of $5,447,000 (including mail pay of $1,087,000).[151] Early in 1951 the CAB dismissed the investigation.[152]

There are a number of difficulties in the way of obtaining desirable mergers. One is that under existing law they are voluntary, and the carrier's proposals might only coincidentally fit in with an overall plan. Debate has been vigorous as to whether or not the CAB should be given powers for compulsory mergers, with a majority against it. Another difficulty is that, with a guarantee of mail payments against long-term losses, the airlines are lacking in the usually powerful motive of fear of bankruptcy. Another is the natural disinclination of the top managements of airlines to negotiate themselves out of their own jobs and positions of power.

But the main objection to mergers as a means for reducing competition is that they tend more often to increase competition than to decrease it. For example, when the American-Mid-Continent merger was disapproved, the CAB said that the combination would divert too much traffic from other carriers, that is, that its competitive impact would increase. In the Braniff-Mid-Continent merger which was approved, minor competition was eliminated between Kansas City and Houston, but additional competition was created in the markets of Chicago-Tulsa, Chicago-Joplin, Joplin-San Antonio, San Antonio-St. Louis and others.[153] The Delta-Chicago & Southern merger increased competition by the merged company against American between Dallas/Fort Worth on the one hand and Chicago, Detroit, Memphis, and St. Louis on the other; against Braniff in the Fort Worth/Dallas-Chicago market; and against Eastern between Detroit, Toledo and Fort Wayne on the north and Cincinnati, Atlanta, Jacksonville, and Miami on the south.[154]

Carriers that apply for mergers normally believe that the combination will improve their competitive strength. Rarely does a merger involve parallel routes between the applicants. Never has a route transfer been requested for the sole purpose of eliminating a direct competitor from the operation. In fact, the Civil Aeronautics Act has been interpreted as specifically prohibiting such actions in Section 408 (b): ". . . The Authority shall not approve any consolidation, merger, purchase, lease, operating contract, or acquisition of control which would result in creating a monopoly or monopolies and thereby restrain competition. . . ." Obviously, if mergers and route transfers were to be used to reduce competition, this section of the Act would have to be amended or drastically reinterpreted.

Pooling and Regulation of Capacity

Pooling is a means of voluntary agreement to reduce competitive pressure. In transportation, it usually covers routes for which each

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[151] U. S. Civil Aeronautics Board, *Recurrent Report of Financial Data.*
[152] CAB Order E-5205, National Route Investigation, decided March 16, 1951.
[153] CAB Order E-6459.
[154] Examiner's Report attached to CAB Order E-7052.

carrier agrees substantially to bear the costs of his own schedules, but all revenues are placed in a common fund (pool) to be divided on an agreed percentage basis.

Pooling among air carriers is legal under Section 412 of the Civil Aeronautics Act when approved by the CAB. However, the CAB is opposed to pooling:

> Pooling agreements like other agreements which tend to eliminate competition generally are contrary to the public interest, except in unusual circumstances . . . we do not deem it appropriate to take any action at this time which would indicate approval even in principle of pooling agreements. . . .[155]

Pooling has the advantage of cutting excess scheduled capacity, since the participants in the pool generally schedule flights as would a single management. Pooling has a disadvantage in its instability except under special conditions. One great difficulty in reaching even an initial agreement is determining the percentage division of the revenues in the pool.[156] Even after the agreement is made, it may not be renewed. If any participant feels that he is becoming stronger, he becomes discontented with his share of the pool. He may be financially better off than the others, and able to afford new aircraft, more schedules, more intensive salesmanship, or more low-fare flights. He might then drop out of the pool, and the route would be wide open to competitive practices again. If he has such opinions in the beginning, of course, the pool will not even be formed.

Water transportation has had conference agreements for some time and pooling has been authorized. But some of the competitors on a trade route have refused to join; with changing economic and competitive conditions the agreements have been broken, followed by rate wars and heavy losses, and after experience with these sad financial results, new agreements.[157]

Pooling among the railroads has been legal since 1920, but the privilege has been practically neglected. This has been partly because mergers could eliminate competition more surely, and partly because the ICC was given the power to fix minimum rates which lessened the penalty of competition, but mainly because the carriers were psychologically attuned to their traditional competitive strategy.[158] The ICC

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[155] 8 CAB 50, Pan American-Panagra Agreement, decided May 5, 1947, p. 61.

[156] Eliot Jones, *The Trust Problem in the United States* (New York: The Macmillan Company, 1921), p. 11.
Arthur Robert Burns, *The Decline of Competition; a Study of the Evolution of American Industry* (New York: McGraw-Hill Book Company, Inc., 1936), p. 147.

[157] U. S. Congress, Senate, *Regulation of Transportation Agencies* (Senate Document No. 152, 73rd Congress, 2nd Session. U. S. Government Printing Office, 1934), p. 9.

[158] Isaiah Leo Sharfman, *The Interstate Commerce Commission; a Study in Administrative Law and Procedure* (New York: The Commonwealth Fund, 1931-1937), Vol. A, p. 205.

and a number of authorities have favored pooling at various times, but not the railroads.[159]

International airlines have had a large number of pools, but the circumstances of the international industry are quite different from the domestic. Each country has veto power over admission of airlines to its territory, and the countries with weaker competitive carriers therefore still have strong weapons to force agreements; "chosen instrument" airlines made for bargaining between governments rather than between commercial enterprises; national ambitions are high and national treasuries are frequently low, making pooling economies more desirable in the face of existing traffic.

Pooling is voluntary on the part of the carriers, and the CAB has only veto power over the agreements. The CAB has been denied power to restrict competition under section 401 (f) of the Act: "No term, condition, or limitation of a certificate shall restrict the right of an air carrier to add to or change schedules, equipment, accommodations, and facilities for performing the authorized transportation and service as the development of the business and the demands of the public shall require."

The CAB has varied in its position on whether or not it should be given this power. In 1943, the CAB requested it over all certificates, especially for those to be issued in the future.[160] It used an illustration of a city which receives excellent schedules from a small carrier, where it would be advisable to add a transcontinental carrier with a limited number of schedules, but where an unrestricted certificate might produce undesirable and destructive competition. The CAB repeated this request in the next year.[161] It repeated it again two years later, but limited its request only to certificates to be granted in future cases.[162] In 1950, the chairman said that the CAB was not prepared to recommend that it be granted control over schedules.[163] Later, in a magazine article, he said that the industry should consider temporary schedule control or pooling without either recommending or condemning the practice.[164]

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[159] Sharfman, *loc. cit.*
Sidney L. Miller. *Inland Transportation: Principles and Policies* (New York: McGraw-Hill Book Company, Inc., 1933), p. 206.
Harold G. Moulton and associates, *The American Transportation Problem* (Prepared for the National Transportation Committee, Washington: The Brookings Institution, 1933), p. xiv.
T. W. Van Metre. *Transportation in the United States* (Chicago: The Foundation Press, Inc., 1939), p. 382.

[160] Letter from Chairman, CAB to Honorable Josiah W. Bailey, U. S. Senate, September 13, 1943, pp. 24-25.

[161] Letter from Oswald Ryan, Acting Chairman, to Chairman, Committee on Commerce, December 11, 1944. U. S. Congress, Senate, Subcommittee on Aviation. Committee on Commerce, *To Create the All-American Flag Line, Inc.* (Hearings, 79th Congress, 1st Session. Washington: U. S. Government Printing Office), 1945, p. 16.

[162] Letter from Oswald Ryan, Acting Chairman, CAB, to Honorable Josiah W. Bailey, Chairman, Committee on Commerce, U. S. Senate, March 11, 1946, pp. 5, 6.

[163] Testimony of Joseph J. O'Connell, Jr., Chairman, CAB. *Air-Line Industry Investigation*, p. 50.

[164] Joseph J. O'Connell, Jr., "Legal Problems in Revising the Air Route Pattern," 15 JRL. OF AIR LAW & COM. 407 (Autumn, 1948).

Pooling, on a voluntary agreement basis, would seem to be a good expedient for temporary schedule restriction during a short business recession. It might even be workable on a semi-permanent basis among airlines in the more distant future, if and when the technological and economic development of the industry have solidified into a fixed competitive status. At present, it is unlikely that many airlines would enter pooling agreements. Most of them would probably not agree to settling for a fixed percentage of a route's traffic, because they feel they might be able to increase their share. Even if some of them wanted such an agreement, it is likely that the stronger of the competitors would not.

Attempting to change the Civil Aeronautics Act to grant the CAB compulsory power over schedules probably would receive great opposition. First, there would be the objection of the airlines to extending the CAB's power into what has always been considered management's function. The strong airlines would particularly oppose it, since they would obviously be the ones whose present competitive advantage would be cut.

With the power, the CAB would be thrown into all the detailed difficulties of trying to work out a pooling arrangement. How would the CAB fix the percentage of revenue each carrier would take from the pool? Should it be on an equal basis, which was most common in international airline pools? Or in proportion to the capacity scheduled, and if so, how to determine which carriers should add or cut schedules when service needs expansion or contraction? What credit should be given for beyond-terminal traffic? Or should there be a sliding scale, with a fixed minimum and a flexible participation in all beyond it?

At one time the CAB regulated number of schedules, but that was under the very unusual conditions of war. During the last war, the airlines were put under control of the military, and the CAB was delegated the authority over scheduling. However, the standards of judgment in specifying schedules were based wholly upon war considerations, and schedules were allocated primarily to relieve priority traffic bottlenecks. Financial considerations were purely secondary; the problem was the wartime one of providing enough capacity for the traffic, just the opposite of the usual peacetime problem of finding enough traffic to fill the available capacity.

Without power over schedules, the CAB has no power to control excess capacity. Any carrier can add schedules indefinitely; any two or three can oversupply the demand. CAB control over route certificates, without control over volume of service provided, is not very effective.

If no other solution were possible, CAB power over schedules would be desirable. Regardless of the difficulties and enormous detail involved in regulating the schedules of a highly competitive industry, compulsory schedule limitation would produce a large net saving in expenses. However, it is a much poorer alternative than a method which could solve the problem and do it once instead of recurrently,

require no interference with the scheduling prerogative of airline managements, and have stable foreseeable results rather than the instability of most pooling arrangements — elimination of competitive routes.

Mail Payments

It has frequently been suggested, as a method to reduce competition as well as to accomplish other objectives, that the CAB use its mail payment powers directly.

One form in which this mail pay power might be exercised is for the CAB to set some fixed maximum rate for certain services. In 1944 and in 1946 the CAB requested that the Act be amended "so as to clarify the present provisions of the bill by clearly authorizing the Authority to fix mail pay at a level corresponding to the apparent value to the public interest of the continued operation of the route, even though the rate so arrived at might not be sufficient to yield the carrier a profit over its estimated cost."[165] A former chairman of the CAB supported the budgeting of airline mail payments, stating that "There would, of course, be bankruptcies, but a commercial world without failures that have to be paid for is not to be found this side of paradise."[166]

He also suggested later that the idea making most sense to him was to have a rate for flying certain routes, and pay that rate to any carrier that the CAB thought should fly it.[167] Denial of all subsidy payment to a carrier for a route thought to be illogical was also supported by the head of the largest airline.[168] In slightly more specific form, setting a fixed rate between any pair of points and paying that same rate to all carriers between the points, was advocated by the head of another of the largest airlines.[169] This latter idea, of course, gives no consideration to the characteristics of any specific routes which may in fact give carriers a subsidy in the form of exclusive franchise rights.

Another suggestion was that a new route receive subsidy only during an initial developmental period of perhaps two to five years. Following that period, the subsidy would be withdrawn leaving the carrier an option on continuing the service without further subsidy.[170]

The other major form in which mail payments have been suggested to control routes is in outright termination of subsidy pay, without any particular time period or limit, when the CAB decides that the public convenience and necessity no longer require the route. The possibility of this was brought up by the Secretary of Commerce,[171]

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[165] Letters from Oswald Ryan, Acting Chairman, CAB, December 11, 1944 and March 11, 1946.

[166] James M. Landis, *op. cit.*, p. 301.

[167] Testimony of James M. Landis, *Air-Line Industry Investigation*, p. 312.

[168] Testimony of C. R. Smith, President, American Airlines, *ibid.*, pp. 781-782.

[169] Testimony of E. V. Rickenbacker, President, Eastern Air Lines, *ibid.*, p. 1119.

[170] M. George Goodrick, "The Air Route Problem in the United States," 18 JRL. OF AIR LAW & COM. 298 (Summer, 1951).

[171] U. S. Department of Commerce, *Issues Involved in a Unified and Coordinated Federal Program for Transportation.* A Report to the President from the Secretary of Commerce (Washington: U. S. Government Printing Office, 1949), p. 18.

and it was specifically recommended by the former chairman (and present member) of the Senate committee with jurisdiction over aviation legislation.[172]

The major objection to these suggestions is that they are probably not legal under the existing Act. Section 406 (b) seems quite clear on the subject. Once a carrier has been granted a mail route, it is entitled to receive mail pay to continue the development of air transportation. If the mail pay will not do this, the CAB is acting illegally. But, of course, if Congress would not appropriate enough funds to underwrite all the mail routes, there would be a fine legal discussion as to whether it was the CAB or the Congress which was violating the Act.

The CAB cannot deliberately regulate number of schedules. Section 401 (f) of the Act specifically states as much. On the other hand, it is obvious that the CAB is not obliged to support every schedule which a carrier wishes to operate. It has been generally recognized that it is within the CAB's discretion to pay subsidy only for those schedules which it considers in the public interest; the CAB cannot do so where carriers receive a "service" rate that pays the carrier solely an amount estimated to be the reasonable cost of carrying the mail.[173]

This power seems to be insufficient to regulate competitive scheduling in accord with any idea of economic logic except that of survival of the largest. Where a subsidy and a service carrier compete, it is usually the service carrier which sets the competitive pace.[174] The subsidy carrier necessarily has to meet this schedule competition, or give up hope of scheduling anything but a token service and of carrying anything but token traffic. Since the CAB cannot restrict the service carrier's schedules, if it wishes to keep the subsidy carrier's route operating it must necessarily pour out mail payments to support more service than is economically justified. If appropriations for mail pay were cut below the ability to support all schedules the CAB would wish to keep, the only reduction possible would be for the subsidy carrier, and if any route had to be suspended because of lack of mail pay support, it could only be the subsidy carrier's routes.

Where competition is between carriers each of which is on a subsidy rate, a situation which would be almost universal during a depression, the CAB would have the legal power to judge as to how many schedules of each carrier should be retained. However, the administrative difficulties would be enormous. About two-thirds of the passenger traffic on the domestic airline system is competitive, flying on hundreds of flights daily. The CAB sets mail rates on a carrier-by-carrier basis, and is usually far behind in its work. When the CAB would try to settle the rate case of any one carrier, it would ordinarily have to take into account the scheduling of that carrier against the competitive scheduling of many other carriers. It would have the choice of restrict-

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[172] Edwin C. Johnson, "Committee Report to the Senate on Separation of Air-Mail Pay from Subsidy," 18 JRL. OF AIR LAW & COM. 348 (Summer, 1951).

[173] Joseph J. O'Connell, Jr., *op. cit.*, pp. 405-406.

[174] *Ibid.*, pp. 405-406.

ing the schedules of the one carrier without at the same time setting the numbers of schedules for the competitors, or of having what would amount to an industry-wide case where it would determine simultaneously all the allowable schedules of all the carriers.

The normal rate case procedure of disallowing schedules on the basis of experienced load factors would quickly break down. Ordinarily, when carriers are fairly equal in their volumes of competitive schedules, they split the available traffic in rough proportion to the number of schedules (with allowance for types of equipment, departure times, etc.). But when any carrier takes a commanding lead in numbers of schedules, it tends to receive more than a proportional amount of traffic because of the much greater schedule convenience it offers the travelers; the minority carrier's load factor then goes down very rapidly. Judged solely on experienced load factor, the weakest carrier would have its mail support reduced to the minimum, and for all practical purposes would disappear from the market except for token service.

Despite all the administrative problems, however, it is possible that the CAB could devise some statistical rules-of-thumb by which to set schedules under varying competitive conditions. They would, of course, be cumbersome, inefficient, and only approximate. If no better method were available, it would have to be tried.

This is not to say that Section 406 (b) should not be changed. There have been many arguments about it, both pro and con. They involve far more issues than competition, and cover a number of important policy problems. But from the point of view of regulating competition, a change in this section of the Act would be advisable only after all other possible solutions had failed.

Recommendations

1. That the airlines and Government become familiar with the costs of competition and their effect upon the industry.
2. That the route decisions of the CAB be reviewed at regular intervals, and that the statistical, financial, and analytical results of these reviews be published.
3. That serious consideration be given to reducing parallel airline competition and thereby raising the traffic density of the route system, particularly in view of a possible business recession or drastic reduction in mail pay appropriations.
4. That the primary method of reducing competition be eliminating routes by means of CAB purchases at reasonable prices.
5. That, as auxiliary methods,
   a. Interchanges be initiated to preserve through services,
   b. Where feasible, voluntary route transfers be authorized,
   c. In doubtful cases, suspension rather than revocation be employed, and
   d. For temporary periods, pooling be tried.

INTERNATIONAL REVIEW*

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

AIR TRANSPORT COMMITTEE — 20TH SESSION OF COUNCIL

Airport Charges

THE Air Transport Committee continued under the chairmanship of Sir Frederick Tymms for the fall session of 1953 (20th Session of Council). The Assembly at its 7th Session in Brighton (June 1953) had requested that the Organization give first priority to the completion of a report on the subject of airport charges (Resolution A7-18) and the Committee therefore took this subject up first, utilizing a draft report prepared by a working group. The Committee devoted nearly the whole session to amending this draft and presented its final report to the Council at the beginning of its 21st session in February 1954. The Council accepted the report, but decided not to adopt it since it contained a number of conclusions which might be construed as recommendations, and the Assembly had asked for a purely objective report without recommendations. Instead, the Council directed that the report should be circulated to contracting States as a study prepared by the Air Transport Committee. At the same time States' views were to be requested concerning the desirability of convening a special conference on the subject of airport charges. Such a meeting might consider methods of charging and might also review the economic position of international airports and consider measures for improving that position (Resolution passed at 3rd Meeting, 21st Session of Council, 8 February 1954).

The study on airport charges prepared by the Air Transport Committee will be published as an ICAO document. It contains three main parts, (1) an analysis of the global economic position of international airports, (2) a review of methods of charging at airports and (3) a brief discussion of the principles governing the determination of charging levels. The report also contains a quantity of statistical tables and diagrams and some explanatory appendices. The main conclusion of the report is that international air transport does not at present pay its full share, on a global basis, of the costs of the airports it uses and that it could probably afford to pay rather more than it pays at present for these facilities. The report points out, however, that there is great variation between the economic positions of different airports and does not recommend any standardization of the levels of charges or even any uniform increase in those levels.

The ICAO Air Transport Committee's study describes a number of different types of landing charge tariff, but concludes that the simple weight-scale tariff is the best for general purposes, the charge to be related directly to the aircraft's maximum take-off weight as given in its certificate of airworthiness. A single comprehensive charge is preferred over a composite itemized charge and extra charges for facilities and services that are normal concomitants of a commercial landing are not recommended.

Policy Principles on Charges

Certain principles of policy were also developed by the airlines (IATA) on airport charges. These principles were submitted to ICAO. While they could not easily be used for specific appplication to each individual airport,

* Compiled by J. G. Gazdik in co-operation with Mr. A. M. Lester, Dr. G. F. FitzGerald and Dr. G. C. Bolla.

IATA felt that they would be of some value to individual airport authorities as a basis on which each could resolve its problems and that in this way a sound and equitable structure of airport charges could be attained in the long run.

The principles so far developed by the airlines were as follows:

1. The various airport facilities and services should be classified according to the use made of them and with the object of making a functional allocation of costs among all beneficiaries as follows:

(a) Basic facilities and services provided to *operators of aircraft* on a common-user basis, such as the landing area and other facilities for common use.

(b) Facilities and services occasionally provided to *operators of aircraft,* normally under private lease or charge arrangements, such as hangar space.

(c) Facilities provided for *government departmental representatives,* such as customs, immigration.

(d) Facilities provided for use of the *general public,* such as trading concessions, public car-parks, sight-seeing facilities.

2. Air navigation facilities and services for aerodrome and approach control should not be considered as airport facilities and services since they form an integral part of aerial highways and air traffic control.

3. Responsibility for the total annual cost of the basic facilities as mentioned in 1(a) should be borne on an equitable basis by all beneficiaries, i.e., the State, the local community and the operators of aircraft, according to the circumstances at each individual airport, due allowance being made for military potential.

4. Total allocable annual cost of the facilities should include only those costs which are directly related to the requirements of operators of aircraft. This implies the exclusion of costs arising from the provision of over-elaborate installations, or unduly expensive construction work.

5. Allocation of total costs between states or local communities on the one hand and the operators of aircraft on the other hand is by its nature not susceptible of precise computation; therefore, the most reasonable and practicable solution is to take as a basis a division according to elements of cost rather than a percentage figure, as follows:

(a) Capital expenditure and the annual charges related thereto should be borne by the states and/or local communities, thus reflecting the public service function of the airport, and the fact that the community exercises a large measure of control over the location, design and construction of the airport.

(b) Maintenance and operating costs should then be borne by operators of aircraft, including state, military and private aircraft operations, commercial non-transport as well as domestic and international transport operations.

6. The operators' share of the costs (mentioned in 5.(b) should be distributed among operators in accordance with the number of ton-landings and should be expressed as a charge for each landing. In calculating the number of ton-landings to be used as a basis for determining the landing charges, full account should be given to the potential rather than actual utilization of the airport, which means that charges should in some instances be based on increased use of airports in the future.

7. These charges to operators should be constructed according to the following methods:

(a) Only one single charge should be levied for each landing; no separate passenger service or other similar charges should be made.

(b) The scale of charges should be based on a straight-line progression according to the all-up weight of the aircraft.

(c) In certain cases special discounts can be given but such discounts should only relate to the nature of operations and always be uniform for all classes of user.

8. The cost of other airport facilities and services provided to individual operators under lease or charge arrangements as mentioned in (1.(b)) should be met by specific charges on the users which would cover the cost of the individual services required.

9. All rates and charges for rendering the facilities and services mentioned in 1(a) and b) should be based upon sound pricing and accounting practices; and information regarding all charges should be readily available to any user.

10. No system should be introduced which discriminates, however, indirectly, in favor of one operator as against another.

11. The cost of airport facilities and services provided to government representatives mentioned in 1.(c) should be borne in full by the departments concerned.

12. The cost of airport facilities and services provided for use of the general public, as mentioned in 1.(d), should in no instance be borne by the operators; any revenue from concessions should be allocated between the airport authorities and the aircraft operators in appropriate proportions.

In setting up these principles, the operators had one very important consideration in mind, namely the effect of these proposals, if accepted, on the current level of airport charges. As the airlines do not have access to detailed statements of airport costs, they could not at this stage discover what would be the effect if the principles enunciated above were applied. They were working in the dark. They were, therefore, only able to utter a general warning as follows:

Should the application of any set of principles involve any increase in the costs borne by the airlines such increase can only be met by higher fares and rates from passengers, freight or mail, or by additional subsidies from Governments if these measures fail to produce more total revenue. The industry has within the last few years been endeavoring, in spite of generally rising costs, to introduce lower levels of fares in order to extend the benefits of air transport to a wider public. These efforts may well be nullified if increases in charges are imposed.

Legal Sub-Committee on Collisions

The Sub-Committee on Aerial Collisions established by the Legal Committee at its Ninth Session, in September 1953, and composed of Messrs. E. A. Ferreira (Argentina), T. B. Cavalcanti (Brazil), C. Ganns (Brazil), C. S. Booth (Canada), S. Iuul (Denmark), A. Garnault (France), A. Ambrosini (Italy), A. A. Kotaite (Lebanon), J. H. Beekhuis (Netherlands), K. Sidenbladh (Sweden) and K. M. Beaumont (United Kingdom) met in Paris from January 12th to 22nd, 1954 and held fifteen meetings. The Sub-Committee drew up the following draft convention and comments*:

DRAFT CONVENTION ON AERIAL COLLISIONS

Chapter I — Principles of Liability

Article 1

1. The provisions of this Convention shall apply to every collision between two or more aircraft in flight, and to other cases where damage

* L. C. Working Draft No. 465, 28/1/54.

is caused to an aircraft in flight, or to persons or property on board thereof, as a result of the operation of another aircraft in flight, even if no actual collision occurred.

2. For the purposes of this Convention, damage to property on board an aircraft shall be deemed to include any compensation for which the operator or carrier, in case of a collision or other interference as mentioned in paragraph 1 of this Article, is held liable to persons on the surface or under any contract of carriage of persons or property, or any contract of employment.

3. For the purposes of this Convention, an aircraft is considered to be in flight from the moment when power is applied for the purpose of actual take-off until the moment when the landing run ends. In the case of an aircraft lighter than air, the expression "in flight" relates to the period from the moment when it becomes detached from the surface until it becomes again attached thereto.

Note on Article 1 (*General*).—This article defines the scope of the draft convention in accordance with Article 24 of the Rome Convention of 1952, according to which the Rome Convention shall not apply to damage caused by an aircraft in flight or by any person or thing falling therefrom to an aircraft in flight or to persons or goods on board such aircraft.

The Sub-Committee discussed whether it would be appropriate to give the draft convention a wider application by extending the expression "in flight" to cover other cases where aircraft were in movement under their own power, because similar reasons which underlie the general rules of the draft convention seem to apply to such cases. The result of the discussion was the adoption of the same definition in the draft convention as in the Rome Convention in order to avoid any overlapping of the rules of the two conventions. A minority view, however, was in favor of including within the scope of the draft convention all collisions between aircraft, even if one or more of such aircraft were not in movement.

The article gives no definition of the notion of "collision," which seems unnecessary, since the draft convention applies also to cases similar to those of collision.

Note on Article 1(2).—In accordance with Article 1(1), the draft convention deals with claims for compensation for damage caused to aircraft in flight or to persons or property on board thereof. It is, however, evident that a collision may result in other kinds of damage. For instance, in damage to third persons on the surface, or in claims for compensation under contracts which are made as a result of a collision. Article 1(2) identifies, in cases where an operator or carrier is held liable for such compensation, his claim for recovery with damage caused to property on board his aircraft. The importance of this identification is evident, especially in Article 10 of the convention where, in accordance with the provisions of the Rome Convention, there is prescribed a distribution of the amount available between the different claims for compensation. If an operator who has not been guilty of any negligence is sued under the Rome Convention, and, in accordance therewith has paid compensation to third persons on the surface, he has suffered a loss which is recoverable from the operator who is liable for the collision which caused the damage on the surface. Such a claim will probably have to compete with other claims for damage caused to the other aircraft and to property and persons on board the aircraft, and the Sub-committee has found it preferable to consider such claims of recovery as claims for compensation for damage to property.

It was discussed whether, in case of damage caused to third persons on the surface, the right of recourse of the operator who is held liable under the Rome Convention should be subject to the limits of the draft convention

or of those of the Rome Convention. It was decided, as appears from the present article (cf. Articles 6, 7 and 10), to make the limits of the draft applicable also to such claims.

It must be noted that the question whether there shall be a right of recourse for compensation paid under the Rome Convention in case of a collision, where none of the operators is guilty of negligence, falls outside of the draft convention.

Article 2

1. Liability for the damage contemplated in Article 1 shall, subject to the provisions of Articles 3 and 4, attach to the operator of the aircraft, the operation of which has caused the damage.

2. For the purposes of this Convention the term "operator" shall mean the person who was making use of the aircraft at the time the damage was caused, provided that if control of the navigation of the aircraft was retained by the person from whom the right to make use of the aircraft was derived, whether directly or indirectly, that person shall be considered the operator.

3. (a) A person shall be considered to be making use of an aircraft when he is using it personally or when his servants or agents are using the aircraft in the course of their employment, whether or not within the scope of their authority.

(b) No action shall be brought against a servant or agent of an operator by the person who suffers damage, except where the damage has resulted from a deliberate act or omission of such servant or agent done with intent to cause damage.

4. The provisions of this Article shall not prejudice the liability of other persons who have caused the damage or contributed thereto, nor the liability arising under a contract.

Note on Article 2(1), (2) *and* (3).—The liability for aerial collision is, under the draft convention, attached to the operator, but, contrary to the system of the Rome Convention, he is not subject to absolute liability, but is only liable when it is proved that he is guilty of negligence. In order to avoid any misunderstanding of the concept of "operator," the draft convention expressly defines what is meant by this, and the definition is in accordance with that of the Rome Convention. The draft convention also reproduces the definition of the Rome Convention relating to the notion of "making use of an aircraft," when it is said that a person shall be considered to be "making use" not only when he is using the aircraft personally, but also, on certain conditions, when it is used by his servants or agents. It appears from this definition that an operator must be considered as having acted negligently in cases where his servant or agent has been guilty of such negligence, even if the operator himself could not be personally blamed for the acts which have caused damage.

It should be noted that it is impossible to bring an action under the draft convention against a servant or agent except in case of wilful misconduct or similar cases. Whether the operator who has been held liable for damage caused by his servants or agents shall have a right of recourse against such servants or agents is not decided by the draft convention, and the solution of this question is therefore left to the national law.

Note on Article 2(4).—This provision says expressly that persons other than the operator may also be liable for damage arising from the collision, but the draft convention contains no provisions concerning the liability of such persons. Further, the draft convention makes a reservation concerning liability arising from contracts. This means that the liability of the carrier

to passengers on board the aircraft is still subject to the provisions of the Warsaw Convention.

Article 3

If the person who was the operator at the time the damage was caused had not the exclusive right to use the aircraft for a period of more than fourteen days, dating from the moment when the right to use commenced, the person from whom such right was derived shall be liable, under the provisions of Article 6 and Article 7, jointly and severally with the operator.

Note on Article 3.—Article 3 reproduces Article 3 of the Rome Convention and is based upon the same considerations in principle — namely, that if the operator has the right to use the aircraft for a very limited period only, it seems necessary to hold the original operator liable for such damage as may occur. It cannot be assumed that the other person, who is operator under the draft convention, has taken out the insurance which is necessary to cover his liability under the draft convention, and in many cases his personal assets will be insufficient to pay the claims which may be made in the case of a collision. The system of Article 3 is therefore the following: The person who has obtained the right to use the aircraft for a very limited period is considered to be the operator and is liable as such under the provisions and within the limits of the draft convention. The person from whom the right was derived is liable jointly and severally with the former up to the limits of the draft convention (with the exception in Article 7), irrespective of his personal care or negligence. His liability must therefore be characterized in such cases as absolute but generally limited.

Article 4

If a person makes use of an aircraft without the consent of the person entitled to its navigational control, the latter, unless he proves that he has exercised due care to prevent such use, shall be liable, under the provisions of Article 6, jointly and severally with the unlawful user for damage giving a right to compensation under Article 1.

Note on Article 4.—This article reproduces in principle Article 4 of the Rome Convention and refers to the case of unlawful use. The provision is similar to that of Article 3, in so far as the owner of the aircraft is jointly and severally liable with the unlawful user, but, while under Article 3 the liability of the person from whom the right was derived is absolute, the liability of the owner under Article 4 is based upon negligence, but with shifting of the burden of proof in so far as it is the owner who must prove that he has not been quilty of negligence, while it usually is the claimant upon whom the burden of proof of negligence is placed. Another difference is that the unlawful user in accordance with Article 7(2), in general, will be liable without any limits, while the owner *ex hpyothesi* cannot be liable without limits. For this reason the text refers only to Article 6 and not to Article 7, as in Article 3. A large minority, however, did not share this point of view.

Article 5

The operator shall be liable only when it is proved that damage was caused by his negligence or by that of his servants or agents using the aircraft in the course of their employment, whether or not within the scope of their authority.

Note on Article 5.—This provision states the general principle of liability: negligence. Contrary to the CITEJA draft and the Brussels Convention

on Collisions between Vessels, the principle of negligence is not expressed by mentioning all the situations in which there shall be no liability — for instance, in cases of fortuitous events, *force majeure*, etc., but by stating that the damage must be caused by the negligence of the operator or by that of his servants or agents. As mentioned above, it is left to the claimant to prove that such negligence exists, and no presumption of negligence is prescribed for any case of collisions. Article 2(3) of the Rome Convention contains another presumption, when it states that the registered owner shall be presumed to be the operator and be liable as such. There is no need for a similar presumption in the draft convention, and, moreover, it would seem useless since it will be of little importance for a claimant to be entitled to sue a certain person as operator under this convention, when he is unable to prove that this person has caused the collision by his negligence. It must also be noted that, if a person other than the operator is guilty of a collision, he can be sued outside of the draft convention without being entitled to its limits and without being subject to its provisions. In the rare cases in which it may be doubtful whether the owner of an aircraft is the operator or not, the defendant himself will be interested in proving that he is the operator.

CHAPTER II — Extent of Liability

Article 6

1. Subject to the provisions of Article 7, the liability of any person for damage giving right to compensation under Article 1, for each aircraft and incident, shall not exceed: . . . . francs.

2. The liability in respect of loss of life or personal injury shall not exceed 500,000 francs per person killed or injured.

3. The sums mentioned in francs in this Article refer to a currency unit consisting of 65½ milligrammes of gold or millesimal fineness 900. These sums may be converted into national currencies in round figures. Conversion of the sums into national currencies other than gold shall, in case of judicial proceedings, be made according to the gold value of such currencies at the date of the judgment, or, in cases covered by Article 10, at the date of the allocation.

Note on Article 6(1).—From the beginning of the work of preparing an international convention on aerial collisions, it was realized that the liability of the operator for such collisions should be limited. The Legal Committee has on its work programme an item called "Global Limitation of Liability," the aim of which is to fix a maximum limit for all kinds of liability which an operator may incur. It is obvious that the discussion of this problem would be useless if liability for air collisions were not subject to limits. It has been objected against limitation of liability for collisions that such a principle is inappropriate if liability is based upon negligence, and that liability must therefore be unlimited. This objection, however, does not appear to be relevant since the Rome Convention recognizes a limitation of liability, even in cases where it can be proved that the operator was guilty of a high degree of negligence, the only cases of unlimited liability under the Rome Convention being unlawful use and the case where damage is caused by a deliberate act or omission done with intent to cause damage. On the other hand, it seems inadvisable to limit the liability for collisions in accordance with the principles of the Rome Convention, namely, in accordance with the weight of the aircraft. It will be remembered that the principle of the Rome Convention was criticized by several States as being unsatisfactory, but, as regards damage caused on the surface, it must be admitted that statistically there is a certain correlation between the damage caused by an aircraft and its weight. Concerning aerial collisions, such a

correlation does not exist. A small aircraft may cause the destruction of a very large aircraft and it therefore seems necessary, if liability is to be scaled, that the scale should not be based on the weight of the respective aircraft.

It must not be overlooked that the economic consequences of the limitation of liability may be very different for operators of small aircraft and for other operators, and in order not to enlarge the economic burdens for operators of small private aircraft, it might be found advisable to lay down special rules concerning smaller aircraft. On the other hand, it must be remembered that(if negligence is the condition of liability, there seems to be less reason for reducing the liability than when liability is absolute, and the Sub-committee has not been able to make definite proposals with respect to a possible scaling of liability in accordance with factors other than the weight of the aircraft. Therefore, it is suggested to provide for a single high limit applicable to all aircraft, the amount to be left for the consideration of the appropriate authorities.

Note on Article 6(2). — The Sub-committee discussed the question whether the draft convention should contain a special limit of compensation for each person in case of loss of life or personal injury. Objection was raised against such a rule on the ground that it is immoral to have a special limit for such damage, which would in some cases deprive the victims of full compensation even if the person liable was guilty of negligence. On the other hand, it was argued that, under the present Warsaw and Rome Conventions, such a special limit is found, and that such a limit was necessary, in order to avoid conflicting decisions in similar cases in the different States. It was also argued that persons involved in a collision, usually passengers and the members of the crew, will already be protected to a certain extent by their contracts with the carrier or operator, and that it must be left to themselves to provide for further compensation by taking out insurance in case they do not consider the present system adequate. The decision to retain a special limit for bodily injury was taken by a vote of 5 to 2, with one abstention. As regards the amount of the special limit, the opinions of the members were more divergent, in so far as 4 members voted for the retention of the amount of 500,000 gold francs under the Rome Convention, while 4 members wanted the amount to the changed to that of the Warsaw Convention. The choice must be between these two alternatives. A third one can hardly be contemplated. The decision depends mainly upon whether the position of the persons involved in the collision appears to be nearer to that of innocent persons on the surface than to that of the passenger whose claim for compensation is subject to the rules of the Warsaw Convention.

It is obvious, nevertheless, that if it should be decided to scale the limitation of liability in accordance with the weight of the aircraft, it would be necessary to insert a clause in the draft convention similar to that of Article 11(3) of the Rome Convention, containing a definition of what is unaerstood by "weight of an aircraft."

Article 7

1. If the person who suffers damage proves that it was caused by a deliberate act or omission of the person liable, his servants or agents, done with intent to cause damage, the liability shall be unlimited; provided that in the case of such act or omission of such servant or agent, it is also proved that he was acting in the course of his employment and within the scope of his authority.

2. If a person wrongfully takes and makes use of an aircraft without the consent of the person entitled to use it, his liability shall be unlimited.

Note on Article 7.—This article makes the same exceptions from the principle of limitation of liability as those found in Article 12 of the Rome Convention.

Article 8

Whenever, under the provisions of Article 3 or Article 4, two or more persons are liable for damage, the persons who suffer damage shall not be entitled to total compensation greater than the highest indemnity which may be awarded under the provisions of this Convention against any one of the persons liable.

Note on Article 8.—The Sub-committee discussed whether this article, which reproduces in principle Article 13(1) of the Rome Convention, has any practical importance in the draft convention. It was decided, however, to retain the article because, otherwise, it might not be completely clear under all systems of law that the plaintiff in the cases mentioned in Article 3 and Article 4 shall never receive higher compensation for the damage he has suffered than he is entitled to obtain from the person whose liability exceeds that of the other person. It must be remembered that the cases referred to in Articles 3 and 4 are those in which the operator and another person are jointly and severally liable for damage caused by the aircraft in question. In these cases the liability of one of the persons liable will usually be limited, while the liability of the other person may be unlimited, under Article 7. The result of the present article therefore is that in such cases the plaintiff can never obtain compensation exceeding the loss he has sustained and which he is entitled to recover from the person whose liability is unlimited. A minority view, however, found the provision superfluous since it only contains the logical consequence of the system of Article 3 and Article 4.

Article 9

Actions to enforce a right of recourse against the operator or any other person liable under this Convention shall be subject to the provisions of Article 6 and Article 7.

Note on Article 9.—This provision makes the general rule of limitation of liability applicable to rights of recourse. It may be argued that the rule is superfluous since Article 6 leads to the same result; but, in order to avoid any misunderstanding concerning the scope of Articles 6 and 7, it is considered preferable to insert an express provision.

Article 10

If the total amount of the claims established exceeds the limit of liability applicable under the provisions of this Convention, the following rules shall apply, taking into account the provisions of paragraph 2 of Article 6:

(a) If the claims are exclusively in respect of loss of life or personal injury or exclusively in respect of damage to property, such claims shall be reduced in proportion to their respective amounts.

(b) If the claims are both in respect of loss of life or personal injury and in respect of damage to property, one half of the total sum distributable shall be appropriated preferentially to meet claims in respect of loss of life and personal injury and, if insufficient, shall be distributed proportionately between the claims concerned. The remainder of the total sum distributable shall be distributed proportionately among the claims in respect of damage to property and the portion not already covered of the claims in respect of loss of life and personal injury.

Note on Article 10.—This article reproduces Article 14 of the Rome Convention. It should be noted that, in accordance with Article 1(2) of the draft convention, claims for compensation for damage to property are deemed to include, for instance, claims which may be made in recourse for compensation for bodily injury paid under the Rome Convention.

CHAPTER III — Apportionment of Liability and Rights of Recourse

Article 11

If the damage is caused by the contributory negligence of the operators of two or more aircraft, or of their servants or agents using the aircraft in the course of their employment, whether or not within the scope of their authority, the liability shall be in proportion to the respective degrees of negligence proved. If the proportions cannot be determined, the liability shall be shared equally. In no case, however, except as provided by Article 7, shall the liability of any of the persons liable exceed the limits provided for in Article 6.

Note on Article 11.—This article introduces into air law the principle of apportionment of liability, which is a well established principle in maritime law concerning collisions between vessels and which is in several States adopted as a general rule of law with respect to cases of contributory negligence. The provision was adopted by a vote of 6 to 2. The minority was in favor of the solution that each operator should bear his own loss in case of contributory negligence. In the view of the minority such a provision would prevent unnecessary litigation and relieve the courts from the difficulties of establishing degrees of negligence where no real evidence could be obtained.

In the English text the words "contributory negligence" are used; in the French text *"faute commune."* It was discussed thoroughly whether these two expressions have exactly the same scope, because "negligence" might be understood as not including cases of wilful misconduct. It was, however, pointed out that the phrasing of the English text could not exclude an apportionment of liability in case of wilful misconduct where the other operator was guilty of a high degree of negligence. Under these circumstances it was decided to retain the present wording of the article.

Article 12

If owing to limitation of liability under a contract of carriage or of employment, a person suffering damage cannot obtain full compensation from the carrier or operator, the excess may be recovered from persons liable under this Convention, under its provisions and within its limits, and in accordance with the principle of apportionment of liability under Article 10. Nevertheless, the carrier or operator whose liability is limited, as mentioned above, shall not be subject to a claim for recovery of the excess or to an action of recourse for payment of such excess.

Note on Article 12.—The intention of this article is, on the one hand, to make it possible for a person who has to a certain extent obtained compensation for damage under a contract, to recover the excess (i.e. the difference between the damage suffered and the compensation under the contract) from a person who is liable under the draft convention. On the other hand, it is also intended to prevent a solution according to which the total liability of a person who is liable to a person both under the draft convention and under a contract, might exceed his contractual liability. If an operator or carrier has been guilty of negligence with the result that a collision arises, but the other operator has also been guilty of negligence, a passenger on board the first aircraft may sue his carrier under the Warsaw Convention, and afterwards under the draft convention sue the operator of the other

aircraft for the amount which he has not obtained under the Warsaw Convention. For this amount, the other operator will only be liable subject to apportionment of liability, and for the compensation he pays to the plaintiff he can have no right of recourse against the former operator or carrier.

It should be noted that the provision does not apply to cases where a passenger cannot sue his carrier under a contract — e.g., stowaways.

Article 13

Any person who has paid compensation exceeding that for which he is liable under this Convention, shall be entitled to exercise a right of recourse against any other person liable under this Convention, subject to the provisions and within the limits thereof.

Note on Article 13.—It was questioned whether it was possible to include in the draft convention a rule similar to that of Article 4 of the Brussels Convention, according to which no person shall be liable even to a third party, for more than the proportion of damage due from him in accordance with the apportionment. The Sub-committee, however, found such a provision contrary to Article 7 of the Rome Convention and for other reasons inadvisable.

CHAPTER IV — Rules of Procedure and Limitation of Actions

Note on Chapter IV.—Chapter IV and Chapter V of the draft convention are as a whole a reproduction of the corresponding provisions of the Rome Convention, while the provisions of the Rome Convention concerning security for operators' liability have no equivalent in the draft convention. It must be taken into account that, while it may seem important that an innocent victim on the surface can be sure that he will receive adequate compensation for damage he suffers, similar reasons cannot be recognized for protecting by special securities the persons directly involved in an aerial collision since they are able to take out insurance against the risks which are connected with air transport, including the risk of a collision. It was argued that a chapter on security for liability must be considered as being extremely important, but the majority of the Sub-committee decided not to include any rules on this subject in the draft convention. It may be added that the corresponding chapter in the Rome Convention was exposed to very strong criticism by several of the delegates and it was proposed to delete it completely.

Article 14

1. Actions under the provisions of this Convention may be brought only before the courts of the Contracting State where the damage occurred. Nevertheless, by agreement between any one or more claimants and any one or more defendants, such claimants may take action before the courts of any other Contracting State, but no such proceedings shall have the effect of prejudicing in any way the rights of persons who bring actions in the State where the damage occurred. The parties may also agree to submit disputes to arbitration in any Contracting State.

2. Each Contracting State shall take all necessary measures to ensure that the defendant and all other parties interested are notified of any proceedings concerning them and have a fair and adequate opportunity to defend their interests.

3. Each Contracting State shall so far as possible ensure that all actions arising from a single incident and brought in accordance with paragraph 1 of this Article are consolidated for disposal in a single proceeding before the same court.

4. Where any final judgment, including a judgment by default, is pronounced by a court competent in conformity with this Convention, on which execution can be issued according to the procedural law of that court, the judgment shall be enforceable upon compliance with the formalities prescribed by the laws of the Contracting State, or of any territory, State or province thereof, where execution is applied for:

(a) in the Contracting State where the judgment debtor has his residence or principal place of business or,

(b) if the assets available in that State and in the State where the judgment was pronounced are insufficient to satisfy the judgment, in any other Contracting State where the judgment debtor has assets.

5. Notwithstanding the provisions of paragraph 4 of this Article, the court to which application is made for execution may refuse to issue execution if it is proved that any of the following circumstances exist:

(a) the judgment was given by default and the defendant did not acquire knowledge of the proceedings in sufficient time to act upon it;

(b) the defendant was not given a fair and adequate opportunity to defend his interests;

(c) the judgment is in respect of a cause of action which had already, as between the same parties, formed the subject of a judgment or an arbitral award which, under the law of the State where execution is sought, is recognized as final and conclusive;

(d) the judgment has been obtained by fraud of any of the parties;

(e) the right to enforce the judgment is not vested in the person by whom the application for execution is made.

6. The merits of the case may not be reopened in proceedings for execution under paragraph 4 of this Article.

7. The court to which application for execution is made may also refuse to issue execution if the judgment concerned is contrary to the public policy of the State in which execution is requested.

8. If, in proceedings brought according to paragraph 4 of this Article, execution of any judgment is refused on any of the grounds referred to in sub-paragraphs (a), (b) or (d) of paragraph 5 or paragraph 7 of this Article, the claimant shall be entitled to bring a new action before the courts of the State where execution has been refused. The judgment rendered in such new action may not result in the total compensation awarded exceeding the limits applicable under the provisions of this Convention. In such new action the previous judgment shall be a defence only to the extent to which it has been satisfied. The previous judgment shall cease to be enforceable as soon as the new action has been started.

The right to bring a new action under this paragraph shall, notwithstanding the provisions of Article 15, be subject to a period of limitation of one year from the date on which the claimant has received notification of the refusal to execute the judgment.

9. Notwithstanding the provisions of paragraph 4 of this Article, the court to which application for execution is made shall refuse execution of any judgment rendered by a court of a State other than that in which the damage occurred until all the judgments rendered in that State have been satisfied.

10. Where a judgment is rendered enforceable under this Article, payment of costs recoverable under the judgment shall also be enforceable. Nevertheless the court applied to for execution may, on the application of the judgment debtor, limit the amount of such costs to a sum equal to ten *per centum* of the amount for which the judgment is rendered enforceable. The limits of liability prescribed by the Convention shall be exclusive of costs.

11. Interest not exceeding four *per centum* per annum may be allowed on the judgment debt from the date of the judgment in respect of which execution is granted.

12. An application for execution of a judgment to which paragraph 4 of this Article applies must be made within five years from the date when such judgment became final..

Note on Article 14.—Article 14 reproduces the corresponding article of the Rome Convention with small changes. It must, for instance, be noted that there is no reference in paragraph 9 to a period within which claims shall be presented in order to have priority over other claims. The reason is that it is found inadvisable to establish a system according to which, in the first place, a provisional distribution of the amount available shall take place, and in the second place a final distribution. Such a system may be natural as regards third persons on the surface, but will probably be without practical value as regards persons involved in a collision. The most important question under Article 14 is whether cases under the draft convention may be brought before one or more courts. In the Rome Convention, all suits under the Convention shall in principle be brought before the court of the place where the damage occurred. In the Warsaw Convention, the plaintiff has the choice between several courts, and a similar rule was found in the CITEJA draft. It seems advisable, as far as possible, to unify the rules of forum in the different conventions, and during the discussion in the Sub-committee is was suggested to solve the problem in according with the provisions of the Warsaw Convention. The majority of the Sub-committee was, however, in favor of the system which is found in the Rome Convention, and wished to restrict the exception which is found there concerning agreements between the parties about other courts, since the majority found it necessary to recognize only those agreements to which all persons involved in a collision were parties. When it is found necessary to recognize only one court as competent, the reason is that the draft convention to a certain extent is based upon the principle of apportionment of liability, and therefore the possibility that the apportionment may be made in different ways in different courts must be avoided. Therefore, a choice must be made in the draft convention between several possible courts, with the exclusion of all other courts, and the only forum which has a natural preference to other courts is that of the place where the damage occurred. While under the Rome Convention the question of evidence plays no important role, it is obvious in case of a collision where liability possibly will be apportioned in accordance with the negligence proved, that evidence is available, and such evidence will probably be easier to obtain at the place where the damage occurred than in any other place. The minority which favored an extension of the application of the draft convention (see Article 17) pointed out that, if such an extension were accepted, it would be necessary to give up the single forum solution.

Article 15

1. Actions under this Convention shall not be admissible after a period of three years from the date of the incident which caused the damage.

2. If an operator or carrier or any other person is sued for damage arising from a collision, he may, by giving notice thereof to the person against whom he may have a right of recourse, reserve such right. The period referred to in paragraph 1 of this Article, to which the right of action of recourse is subject, shall be suspended until the original claim has been disposed of by final judgment or settlement. In other cases the grounds for suspension or interruption of the period

referred to in paragraph 1 of this Article shall be determined by the law of the court trying the action.

Note on Article 15(1).—The period of limitation is three years taking into account that the corresponding limitation prescribed by the Warsaw and the Rome Conventions is two years. Before claims under these conventions have been settled, it will in many cases be impossible to decide what claims can be brought under the draft convention.

Note on Article 15(2).—In view of the fact that many of the claims under the draft convention will be actions of recourse, it will probably in many cases be a long time before the claims can be brought before the courts, and the limitation of three years of paragraph 1 will therefore very often be insufficient for the plaintiffs. For these reasons, paragraph 2 provides for a special rule of suspension of the period of limitation in such a way that it is only necessary for a plaintiff who may have a right of recourse based upon a claim brought against himself to give notice thereof to the person against whom he wishes to reserve his right of recourse. When such notice has been given, the period of limitation is suspended with respect to the action of recourse, but as soon as the claim upon which the right of recourse is based is finally settled, the suspension ceases, with the result that the action of recourse must be brought before the court within the remaining part of the period of limitation. With respect to the phrasing of the Article, it must be noted that the expression "prescription" has been avoided in the French text, since it might cause difficulties in interpretation resulting from the difference between "prescription" and "déchéance." The present phrasing is extended to make it clear that, when the period of three years, with possible extensions due to suspension, has elapsed, the possibility of bringing the action before the court shall be excluded.

Article 16

In the event of the death of the person liable, any action under the provisions of this Convention shall lie against those legally responsible for his obligations.

CHAPTER V — Application of the Convention and General Provisions

Article 17

This Convention applies to damage contemplated in Article 1 caused in the territory of a Contracting State when at least one of the aircraft involved is registered in the territory of another Contracting State.

Note on Article 17.—The territorial scope of the draft convention is rather limited and a minority proposed to extend the application of the draft convention also to cases where the collision takes place over the high seas or in the territory of non-contracting States. As regards collision over the high seas, it was, however, questioned whether there was any practical need for such a provision since in case of a collision over the high seas, it will hardly be possible to prove the negligence upon which liability according to this draft convention shall be based. With respect to a collision caused in the territory of a non-contracting State, it must at least be a condition for the wider application of the draft convention that more than one aircraft is registered in contracting States. But, even with this reservation, it seems inadvisable to extend the application of the draft convention to such cases. If a collision takes place in the territory of a non-contracting State, the courts of this State will, in accordance with the general rules of procedure, be competent to hear any case which arises from such a collision, and it is not possible by the Convention, on one hand, to impose upon the courts of a

non-contracting State the obligation of deciding cases in accordance with the provisions of the Convention. On the other hand, it seems difficult to restrict the competence of the courts in the State where the collision occurred by giving other courts competence under the draft convention; and even if this solution was adopted, it still remains very doubtful what other courts should be competent to try cases arising from such a collision.

Article 18

This convention shall not apply to damage caused to or by military, customs or police aircraft.

Article 19

Contracting States will, as far as possible, facilitate payment of compensation under the provisions of this Convention in the currency of the State of the claimant.

Article 20

If legislative measures are necessary in any Contracting State to give effect to this Convention, the Secretary General of the International Civil Aviation Organization shall be informed forthwith of the measures so taken.

Article 21

For the purposes of this Convention:

— "Persons" means any natural or legal person, including a State.
— "Contracting State" means a State whose ratification of or adherence to the Convention has become effective and whose denunciation thereof has not become effective.
— "Territory of a State" means not only the metropolitan territory of a State but also all other territories for the foreign relations of which that State is responsible.

INTERNATIONAL AIR TRANSPORT ASSOCIATION

Traffic Conferences, Honolulu, November 2nd to 22nd, 1953

The IATA Traffic Conferences met in Honolulu from November 2nd to 22nd, 1953 and agreed to 423 unanimous resolutions, covering more than 30,000 rates and fares and related subjects. The major features of the agreements were these:

Completion of the air tourist network around the world by provision for trans-Pacific tourist class. Addition of tourist class over the mid-Atlantic. Worldwide standardization of baggage allowances for both tourist and first class passengers at 44 and 66 pounds respectively. Readjustments of first class and tourist fare levels in many parts of the world after the first 18 months' experience of their relationship. Worldwide agreement on many phases of the conditions of tourist service which differentiate it from first class. Initiation of new quantity discounts on scheduled air cargo service in some parts of the world. A new universal standard code for acceptance, labelling and handling of special or "restricted" cargoes. Adoption of a worldwide standard Conditions of Carriage (Rules Tariff) for Passengers and Cargo. See H. Drion, "Towards A Uniform Interpretation of the Private Air Law Conventions" on uniform conditions of contract and carriage, 19 Jrl. of Air Law & Com. 423, (Autumn, 1952).

Tourist Conditions

It was noted that the airlines were closer to worldwide agreement on standards for tourist class as the kind of travel which would give the public the most transportation, with the fewest frills, for the lowest possible price.

There would be some discrepancies in standards for first and tourist because they were still in a transitional period, working with aircraft designed and built for first class transport before international tourist started. However, substantial uniformity on seating accommodation, baggage allowances, cabin attendants, meal service, bar facilities, "give-aways" and the like have been attained.

Agreements on seating densities set the minimum number of seats which could be offered in tourist aircraft of a given type and range from 21 in some types of DC-3s to 107 in two-decker Breguets. A complete study of both traffic and technical aspects of tourist seating densities would be conducted during the coming year by IATA.

Baggage allowances throughout the world have been standardized at 20 kilograms (44 pounds) for tourists and 30 kilograms (66 pounds) for first class. Previous allowances had ranged from 33 lbs. on short European journeys to 88 lbs. on very long flights. All excess baggage transported with the passenger would be charged at a straight one per cent of the one-way adult fare.

No alcohol would be sold or served on tourist aircraft in the Western Hemisphere or across the Pacific. Elsewhere, it would only be sold at specified minimum prices. The number of cabin attendants allowed for tourist class would depend to some extent on the area in which the service operated. In the Western Hemisphere and across the Pacific, a maximum of one on DC-3 aircraft and two on all others would be allowed. In Europe and on routes between Europe and the Far East, there would be a maximum of three attendants. The transatlantic allowances would be two attendants for 60 passengers and three for any larger number.

Mixed Class Aircraft

Aircraft carrying both tourist and first class passengers, which would be used by about 15 airlines, were allowed under IATA Conference Resolutions. In order to assure proper economies and good passenger relations, these stipulated that the two classes in mixed aircraft should be kept effectively separated and that tourist accommodation should be the same in proportion to that provided in all-tourist planes.

Analysis of Fares and Rates

Area-by-area highlights of the fares agreements of the IATA Traffic Conferences could be summed up as follows:

Trans-Pacific — The Conferences agreed that tourist service across all three of the Pacific routes would begin April 1 next between North America on the one hand and Australia and New Zealand; Malaya, Siam, Hong Kong and the Philippines; and Japan and Korea. Tourist fares over all three routes would run about 25 per cent below existing first class fares, which would themselves remain unchanged except for a few upward adjustments of $35 to $50 in fares between North America and Singapore, Sydney and Hong Kong. Fares would remain stable throughout the year and both tourist and first class would be subject to the usual 10 per cent round trip discount. Examples of the new low-cost Pacific tourist fares, on a one-way basis, are Tokyo-San Francisco, $488; Manila and Hong Kong-San Francisco, $550; and Sydney-Vancouver, $540. International one-way tourist fares from Honolulu to the west would include $386 to Tokyo, $486 to Manila, and $436 to Sydney.

Western Hemisphere — The price of air transport in international routes in the Western Hemisphere would remain unchanged except for the addition of a few new points to the tourist service network in the Caribbean area and some readjustments of individual rates and fares which were described as "a tidying-up job."

Transatlantic — On the important North Atlantic route, the IATA Conferences voted to narrow slightly the differential between tourist and first class fares and to apply small increases to both to meet rising costs. The basic North Atlantic fare between London and New York will be $400 one way and $720 round trip, as against the present $395 and $711. The tourist fares would be $290 one-way and $522 round trip, as against $275 and $495 at present. Off-season round trip fares, from November 1st through March 31st, would be $640 first class and $425 Tourist, as against the present $611 and $425. New tourist services across the Atlantic to Lisbon would be inaugurated.

Fares on the mid-Atlantic route between the Americas and Europe would remain largely unchanged until October 1st, 1954, when tourist services across this route would be introduced. After that date, there would be upward adjustments in first class fares. First class fares between Europe and South America over the South Atlantic would rise about 7 per cent, due largely to currency fluctuations.

Europe — On the basis of eight months' trial and error since the first introduction of tourist fares into Europe last May, the IATA Conferences voted a number of readjustments in various sector fares in Europe, with slight increases on short routes to compensate for increased free baggage allowances, and slight decreases on longer routes. There would be a better balance between frequencies and amounts of first and tourist class service in Europe and the price differential between them would remain at 15 to 20 per cent.

In addition to the expansion of tourist network itself, the Conferences also agreed upon "special tourist" services between the North of England and Scotland and Scandinavia which would permit further reductions of 10 per cent below tourist in 28-seater DC-3 aircraft.

Europe-Africa — Small increases had been agreed for both tourist and first class Europe-Africa fares, ranging from 5 pounds sterling on the London-Johannesburg fare to five per cent on other fares. The differential between the two classes would remain at 15 to 20 per cent. In addition, new "B" class services in older, slower, non-pressurized aircraft had been agreed between Cyprus and Khartoum at fares 10 per cent below tourist.

Europe-Middle East — Fares between Europe and the Middle East would rise about 10 per cent for both tourist and first class. Tourist fares would run about 18 per cent below first, and fares on the existing "B" class network would be about 12 per cent below tourist.

Europe-India — The London-Bombay off-season fare from September 15th to April 15th would continue at 100 pounds sterling, but the on-season first class fares would be increased five pounds. Tourist fares would go up about three per cent.

Europe-Far East — Fares from Europe to Singapore and Tokyo would be adjusted along various sectors of the route by increases ranging up to 10 per cent on both tourist and first class. Fares between Europe and Australia, and between India and East Africa would remain unchanged.

Far East—First class fares within the Far East and in the South Pacific would generally remain at their present levels, and tourist fares would be introduced on a number of routes at fares about 20 per cent below first. In addition, there would be a special $222 round-trip 30-day excursion between Tokyo and Hong Kong at 30 percent below normal round-trip.

Cargo Rates

Rates for scheduled international air cargo would generally remain as they are, except for a five per cent increase between Europe and points in the Middle East, Far East, Africa and South America. A new bulk discount of 30 per cent for shipments over 440 lbs. (200 kgs.) would be allowed on the transatlantic and North and Central Pacific routes. As a result of representations by the United Nations Educational Scientific and Cultural Organization (UNESCO), and to assist international cultural exchange, the IATA airlines voted to extend to Europe 50 per cent cargo discounts for books which already applied elsewhere.

Restricted Articles

A new set of cargo regulations for the international airlines which would allow shipments of such special cargoes as radioactive isotopes for medical purposes throughout the world on an interline basis had been also approved. The new regulations made the airlines the first form of transport to have standard worldwide rules for acceptance and treatment of cargoes which required special handling. Because of existing differences in procedures, these "restricted articles" had not been movable between many points which were connected only by the services of two or more carriers. Now, however, commodities such as radioactive isotopes, which had very short effective lives, and could often be transported only by air, would be available in territories which they could not reach before. The new regulations should also facilitate shipments on interline basis of water purifiers, chemicals, disinfectants and similar goods which must be rushed in bulk into disaster areas.

The new code was the result of almost three years of study and drafting by a special airlines working group. It provided for the classification, certification, labelling and packaging of several thousand commodities which required special stowage and handling and enumerated those which the airlines would not carry at all.

In the case of radioactive isotopes, the code required that they be kept at specified distances from human beings; be shielded in lead; and that no single aircraft might carry more than four packages of the material, each emitting no more than 10 milliroentgens per hour of all types of radiation. Other restricted articles included corrosives and caustics, gases and inflammable substances. Some were carried only on all-cargo aircraft. Included in the new code were standard pictorial labels which used symbols as well as color codes to alert all cargo handlers to the kind of material involved and indicated the special treatment required. The new labels would help overcome language difficulties and eliminate the risk of occasional color blindness among cargo-handlers. Radioactive materials would have a new symbol based upon one which had been discussed jointly by American and British atomic energy control authorities—a white cloud emitting jagged rays against a red or blue background.

While the IATA resolutions do not become effective until all interested governments agree, a number of states have already approved and the new code and its labels would probably be progressively introduced by IATA member airlines. Provisions of the new code have been made flexible so that more rigid local requirements could be met within the framework of the worldwide standards, and so that new commodities could be added or other changes made.

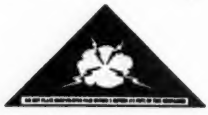
Group III radioactive materials (blue on white)

Corrosive and caustic liquids (black on white)

Flammable liquids, gases, explosives (black on red)

Poison, poison gas and tear gas (red on white)

Flammable solids (black on yellow)



Groups I and II radioactive materials (red on white)

Non-flammable compressed gases (black on green)

IATA Conditions of Carriage—Passengers and Baggage—Cargo

After five years of drafting a standard set of rules governing the carriage of passengers and cargo has been put before the IATA Traffic Conferences and unanimously adopted as a Conference Resolution effective January 1st, 1955. As of that date, IATA airlines shall include in their Conditions of Carriage or Rules Tariff certain uniform rules which were agreed upon in Honolulu. These rules cover a wide variety of subjects including the validity of tickets, stopovers, fares, revised routings, reservations, refusal to carry, cancellation of flights, baggage regulations, rules relating to schedules, delays, refunds and finally rules relating to liability of the carrier, limitation of claims and actions. These Conditions of Carriage have been adopted in two basic parts; one deals with passengers and baggage and the other with cargo.

The adoption of these uniform Conditions by the Traffic Conferences was considered to be a great step forward in the conduct of interline air transport industry. For the first time IATA airlines will be able to accept an interline ticket or an air waybill with the knowledge that the conditions promulgated by the issuing carrier are identical with their own. For the first time, carriers, operating under a legal system, which requires that tariffs or conditions be available for inspection by passengers and shippers, can have the full confidence that this requirement has been largely met.

It should be noted that the adoption of the Conditions of Carriage does not obligate carriers to comply with a specific form in which the uniform Conditions of Carriage are to be published; nor is there any requirement as to what additional provisions will be set forth by carriers in their Rules Tariff and General Conditions of Carriage. It is understood, however, that carriers will not add to this set of Rules provisions altering the meaning or limiting the application of the basic Conditions of Carriage adopted in Honolulu.

OBSERVATIONS AND COMMENTS ON CASES

BATORY VS. SEAPLANE[1]

Lambros Sea Plane Base (Libelant) against M/S Batory, Gdynia America Shipping Line Ltd., (Claimant Respondent), United States District Court, Southern District of New York, N. Y. Dec. 7, 1953. It was provided by the Convention of Paris 1919 (Art. 23) that the principles of Maritime Law should apply to the Salvage of Aircraft wrecked at sea unless there was special agreement to the contrary. The Paris Convention has, however, now been superseded by the Chicago Convention of 1944 which contains no provisions as to salvage. The Salvage of Aircraft at Sea Convention of 1938 is yet to be ratified by any signatory party: as such it has no legal status in International Air Law. Though no useful purpose would be served by examining in detail its provisions, yet Art. 2(2) is worthy of note as "the master of a vessel is bound to render assistance to any person who is in danger of being lost at sea in an aircraft or as the result of a casualty to an aircraft. . . . Salvage means any help which can be given to a person at sea in danger of being lost having regard to the differences between maritime and aerial navigation. The Convention does not expressly impose any obligation to salve ships, aircraft or other property, but provision is made for such service. (Shawcross and Beaumont p. 503-504)."

According to English Law, by the Civil Aviation Act of 1949 Sec. 51, "any services rendered in assisting or saving life from or in saving the cargo or apparel of, an aircraft in, on or over the sea . . . shall be deemed to be salvage services."

As such there was up to the present case under discussion no law pertaining to salvage of aircraft. The importance of the decision contained in the Batory case lies in the three distinct legal principles evolved regarding salvage of aircraft.

> (i) that a seaplane as a species of aircraft is to be deemed a vessel, (ii) that it is a subject of salvage claim, (iii) that there should be no negligence in rendering a salvage aid.

First we will give a brief survey of the struggle that ensued to establish the first rule. In *United States v. Peoples* (DCND. California 1943. 50 Fed. Sup. 462) for the first time under a criminal statute, a seaplane was not considered a "vessel" when a stowaway was charged for the misdemeanor of secreting himself in a naval transport plane. Under the Civil Action there is a long line of authority which did not hold an aircraft to be a vessel. Historically speaking, in *Andrew Foss v. Crawford Bros.* June 27, 1914, 215 Fed. 269. (USAvR 1928 p. 1) in an action in rem for repairs to an aeroplane, Cushman D. J. said, "They are neither of the land nor sea and not being of the sea or restricted in their activities to navigable waters, they are not maritime." (*Ibid.*, p. 3.) In *Reinhardt v. Newport Flying Service* 22 Nov. 1921 (*Ibid.*, p. 4) an attempt was made by Cardoza J. to equate a seaplane to a vessel. By analogy he contended that if

> (i) a canal boat drawn by horses, Robert v. Parsons; (ii) a bath-house upon floats, Public Bath; (iii) a raft, Mary; (iv) a scow, Sunbeam

or anything upon the water where movement is predominant rather than fixity or permanence, could be held a vessel then, the attributes of a seaplane justified its name as a means of water transportation.

Since this decision there emerged two acts passed by Congress—

(1) The Civil Aeronautics Act, 49 U.S.C.A. Sec. 401 etc.

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[1] P. Balachandrian, Member of the Institute of International Air Law.

(2) The Air Commerce Act 1926, 49 U.S.C.A. Sec. 171 etc. whose provisions exclude aircraft of every description from the term "vessel." This led the court to express a forceful but subtle opinion in cases like *Noakes v. Imperial Airways Ltd.* D.C. 1939 29 Fed. Sup. 412-413. (1939 USAvR 1) by distinguishing between the primary and incidental activities of this novel instrumentality. To alight on water when a seaplane reached its destination is purely incidental and therefore it did not function as a vessel.

Facts of the Case

From these decisions we can safely go the Batory Case whose facts are briefly as follows: The pilot of a single seater seaplane, 50 miles from New York and 25 miles south of Fire Island called for help from the commander of the Batory. The pilot's story was that he had no fuel and was not equipped with a compass, a story discovered later which in fact was not true. The Batory commander rescued both the pilot and the seaplane and proceeded on his voyage to Southampton where he handed over the aircraft to Her Majesty's Receiver of Wrecks in accordance with the British Law to await collection by the true owner. Shortly before the ship's arrival at Southampton the owner of the aircraft demanded the return of the plane, for which the owners of the Batory counterdemanded transport charges. This being refused the plane was sold by public auction and proceeds satisfied storage charges.

The plane-owner's chief contention was that a seaplane was not a proper subject of salvage. To this McCrobey D. J. in the court below positively disagreed and referred to the U. S. Code mentioned *supra* which defined the word "vessel" also quoted above. As such he contended that if by analogy

> (i) a canal boat drawn by horses, *The Robert W. Parsons*, 191 W.S. 17, 29-33; (ii) a floating dredge, *Ellis v U. S.*, 206 U. S. 246-249; (iii) a scow, *The Sunbeam* (2 C-A) 195 Fed. 468; (iv) a Bathhouse built on boats, *The Public Bath, No.* 13, 61 Fed. 692 (SD. N.Y.); (v) a raft, The Mary, 123 Fed. 609; (vi) a floating fish net, *Colley v. Todd Packing Co.*, 198 A.M.C. 181, 77 F. Sup. 956

could be included in the term "vessel" then such an analogy could be extended to a seaplane. The learned Judge further cited Reinhardt's case quoted above and commented on the valuable service rendered by the Batory. Here we have the wisdom of Solomon speaking again. But its pride of place was once again apparently threatened.

In the appeal court Kaufman D. J. reversed the judgment but on different grounds. The learned Judge dwelt at length on the qualities of a reasonable man and whether the captain of the Batory measured up to such a mythical creature. He also commended on the motives that prompted the Batory commander to radio to New York Times "to create a favorable atmosphere of publicity" (page 7 in the brief) while agreeing with the plane-owner's contention (a) "that a salvor is entitled to recover salvage even if it later proved that the salvage services requested were not needed." (p. 9)(b) "that prospective salvors should be encouraged to render speedy assistance when a vessel appears in peril," (p. 8); "in none of the cases cited was it urged with the force urged here that the alleged salvor was negligent and reckless to the extent established here" (p. 10). In other words there were two states of mind based on fault (a) recklessness, (b) negligence. He further likened the injury to the plane owner so far sustained (i.e. mere deprivation of his property) to an actual loss or damage while attempting to salve it or return it to the U. S. Though it is too late to complain of (i) motive which is irrelevant in the law of torts, (ii) degrees of negligence which is a reduction ad absurdum, (iii) legal fiction; nevertheless the law on the salvage of a seaplane is taking root. It is confirmed that a sea plane

is a vessel and that it is a subject of salvage. For in the words of the learned Judge "... it is unnecessary for me to determine whether a seaplane may be considered a vessel and hence the subjct matter of salvage. In any event Judge McGhoy passed upon the question in the affirmative on a preliminary motion in this case" (p. 12).

The rule of law may thus be stated. A seaplane is a vessel: as such it is a subject matter of salvage: that there must be no recklessness or carelessness in rendering salvage aid. The last is a principle of Maritime Law. Thus Kennedy L. G. in his treaties on "The Law of Civil Salvage," 3rd edition, p. 162 says, "Misconduct in extreme cases may cause forfeiture of all right to reward"—this reward was held to be forfeited when claimants of salvage improperly had retained possession of the salvaged ship and cargo, and dealt with the cargo by selling it in disregard of owner's interests. (p. 163.)

The ice is broken: the thin end of the wedge has been inserted. One can only be optimistic that the law will soon embrace species of aircraft other than a seaplane as fit subject of salvage.

AIRTRAFIC LTD. V. TRANSOCEAN AIRLINES INC. (SWISS FEDERAL COURT, MAY 16, 1952)

Transocean, an irregular carrier domiciled in Oakland, Calif., undertook by agreement with Airtrafic, a travel agency at Zurich, to transport a group of 26 travellers by air from Zurich to New York via Havana, and back on the same route. Airtraffic paid for the transportation to New York, effectuated by Transocean, but declined to pay the amount agreed upon for the return trip for which the services of Transocean had not been used.

The Court of First Instance (Handelsgericht Zurich, December 19, 1951) directed Airtrafic to pay to Transocean the amount of further Sw. Frs. 20760—for the return trip. It considered that the contractual relations between parties were subject to the law of California, but according to a rule of civil procedure, as it had no definite knowledge of that law, it applied Swiss Law as a substitute (Ersatzrecht).

The Federal Court confirmed former decisions according to which the existence as well as the effects of the contract are subject to the law to which the contract has the most real connection ("den engsten raumlichen Zusammenhang"), i.e. to the law of the domicile of the party whose obligations are characteristic of the contract. In contracts of carriage, this is the law of carrier's domicile, in the case at hand the law of California. However, the Federal Court is not competent to review the application of a foreign law by Cantonal Courts, even if substituted by Swiss law as a substitute, and thus, the Federal Court had to decline to enter into the merits of the case.

A rather important change has, however, occurred since the decision was made in this case. On August 31st, 1953, in the Kunzle v. Bayrische Hypotheken und Wechselbank case, the Federal Court overruled former decisions and held that parties are free to agree upon the law to be applied before as well as after the conclusion of a contract, even during litigation and even by implication, i.e., by common reference to the same law. Thus, if they refer to Swiss (Federal) law, Swiss law will be applied in such cases not only as a substitute and the Federal Court will be competent to review its application by Cantonal Courts.

DR. WERNER GULDIMANN

FEDERAL REVIEWS

MID-WINTER REPORT OF THE COMMITTEE ON AERONAUTICAL LAW OF THE AMERICAN BAR ASSOCIATION

Federal Legislation

The most noteworthy development in the field of Federal legislation relating to aviation is the introduction of S. 2647 by Senator McCarran on January 11, 1954. That bill is a comprehensive rewriting of the Civil Aeronautics Act of 1938, and other statutory provisions relating to Civil Aviation, into a proposed Act to be known as "Civil Aeronautics Act of 1954." The new bill is based upon the experience under this existing Federal legislation and is intended to supply provisions this experience indicates are needed because of the great growth and expansion of the aviation industry since 1938. The Senate Committee on Interstate and Foreign Commerce is undertaking a thorough-going study of this bill. And it would appear that most of the bill is non-controversial and constructive in character.

Your Committee is making a thorough study of S. 2647 and expects to be able to present concrete recommendations based upon this study to the House of Delegates at its meeting in August of this year.

Federal Court Decisions

Several decisions in the Federal courts during recent months were of interest to aviation lawyers.

Other revenues of airlines as offsets to subsidy payments. Where a carrier conducts both domestic and international service, should the profits from domestic operations be used to offset the mail pay requirements of the international operations? Should profits from the sale of a route be used to reduce mail pay? The Civil Aeronautics Board answered these in the negative (*C & S, Latin American Operations, Mail Rate Case* (Order No. E-5793)) and *Braniff Airways, Inc.-Mail Rates-Domestic Operations,* (Order Serial No. E-7904, November 19, 1953). But the Supreme Court in two cases decided on February 1, 1954, reversed the Board and answered the questions in the affirmative. (*C.A.B. and Delta vs. Summerfield,* 22 L. W. 4092; *C.A.B. vs. Summerfield, Western vs. C.A.B.,* 22 L. W. 4094.) The Board had decided that domestic profits should not be offset against international mail pay requirements so as to promote maximum operating efficiency on domestic routes. Similarly, the Board did not want to reduce mail pay by the profits from route sales in order to encourage transactions of this sort which the Board could not compel. The Supreme Court regarded these as policy considerations for the Congress to decide. The present rate formula, it held, is based on "the need" of the carrier after taking into account all of the revenues of its entire operation. According to the Court, the Board had failed to find that the carrier concerned "needed" the mail compensation granted, as well as the funds derived from the route sale in the one case and the domestic earnings in the other.

Interlocking relationships. In a case arising under Section 409 of the Civil Aeronautics Act, which declares certain interlocking relationships unlawful unless approved by the Civil Aeronautics Board, the Board last year held that potential restraint on competition may exist where different partners in an investment banking firm hold directorships in different common carriers. In such a case, one partner is the representative of another (*Lehman Brothers Interlocking Relationships Case,* Order Serial No. E-6447,

May 21, 1952). That decision was affirmed this year by the U. S. Court of Appeals for the District of Columbia (August 6, 1953) in *Lehman, et al. vs. Civil Aeronautics Board.*

State statute imposing absolute liability for damage on the surface. The first case to consider the constitutionality of that provision of the Uniform State Law for Aeronautics, promulgated in 1922, which imposes absolute liability for damage on the surface, arose as a result of the three crashes at Newark in December, 1951 and January, 1952. In *Prentiss, et al. vs. National Airlines* and *Gizzi, et al. vs. American Airlines, Inc.*, the U. S. District Court for the District of New Jersey, on May 13, 1953, held the statute to be constitutional. (See 20 JRL. OF AIR LAW & COM. 371.) Liability without fault under proper circumstances, reasoned the court, is due process of law. Since aviation is ultra hazardous, it falls into the "category of blasting, of the storage of dynamite, of drilling for oil," each of which subjects the persons engaged therein to absolute liability at common law. If limited absolute liability is valid as to aviation by common law, such liability is valid when imposed by statute. The court dismissed the claim that the statute was an unreasonable burden on interstate commerce in that the provisions do not affect the actual movement of airplanes in interstate commerce; they do not affect the average airplane even financially, as would a tax. They affect an airplane owner only financially when there is an accident, and the benefits of the statute do not go to anyone who participates in air travel, such as passengers.

Federal or state jurisdiction over operations between points in the same state. A three judge district court in the Northern District of California had entered a declaratory judgment that the C.A.B. had exclusive control over airline operations between points in California and the Catalina Islands, (*UAL vs. Calif. Pub. Utilities Commission*, 109 F. Supp. 13; see 20 JRL. OF AIR LAW & COM. 116). The judgment was reversed by the Supreme Court on November 30, 1953 on the basis of *Public Service Commission vs. Wycoff*, 344 U. S. 237, in which it was held that the Federal courts should not render a declaratory judgment that certain transportation performed over intrastate routes is in interstate commerce when this issue has not been passed upon by the state administrative agency against which the declaratory judgment is sought. The dissenters in the United case, Justices Douglas and Reed, argued that the declaratory judgment should not be used in this case to save long drawn out administrative hearings and trial to get an adjudication of the basic question which is clear now, namely, is the operation within state or federal jurisdiction?

Tariff limitations on the time in which claims must be filed. Both the Federal District Court for the Southern District of California and the C.A.B. have acted on this matter in the last several months. The court, in *Bernard vs. U. S. Air Coach, et al.* (November 20, 1953) held that a limitation on the time during which a claim must be filed was not part of the tariff by statutory requirement and, therefore, not enforceable. On the same issue, in *Continental Charters, Inc.* (Docket No. 5537, Order Serial No. E-7087, issued January 16, 1953; see 20 JRL. OF AIR LAW & COM. 118), the C.A.B. held that a tariff rule, barring claims for injury to or death of passengers unless a notice of claim was presented to the carrier within 30 days of the occurrence of the event that gave rise to the claim, was unlawful as unjust and unreasonable. The C.A.B., on January 25, 1954, issued a regulation, effective March 2, 1954 (ER-195) providing that no provision of the Board's regulations shall be construed as requiring the filing of any tariff rules "stating any limitation on, or conditions relating to, the carrier's liability for personal injury or death."

Decision by the Civil Aeronautics Board

The following administrative decisions by the Board dealt with problems of interest to aviation lawyers.

Number of seats in DC-4's used for coach service. The Board's views that 64 seats in a DC-4 provide an adequate margin of safety and comfort were restated in two Board orders in 1953. United Airlines' tariff provided that coach service would be operated by aircraft with 64 seats, but it was regularly selling only 54 of the seats. When United petitioned for exemptions from the tariff provisions of the Act to continue selling only 54 seats until it could convert its aircraft to 58, the Board denied the petition. When United filed a revised tariff rule providing coach service in 54 seated equipment until 58 seats could be installed, the Board suspended the rule pending investigation, but the investigation was dismissed when the rule was amended.

Freight Forwarders. The five year trial period, for which the freight forwarders were permitted to operate by Part 296 of the Economic Regulations, expired on October 15, 1953. To determine whether the permissive regulations should be extended and amended, the Board initiated an investigation by order Serial No. E-7141 on February 5, 1953. That investigation is now underway.

First-class mail by air. After the Comptroller General had held that surface first-class mail could be carried by air, an experiment in the transportation of such mail commenced during September of 1953. Mail rates were prescribed specially for this type of mail traffic to be effective until September 30, 1954. Unlike air mail, the first-class mail carries no priority and is transported on a space available basis. The movements authorized are between Washington and Chicago, and New York-Newark and Chicago. The local service airlines handled first-class mail during the holiday season, and their authorization has been continued by the C.A.B. to the end of this calendar year.

Financial Responsibility Regulation. In 1952, the C.A.B. circulated a proposed regulation requiring all air carriers to show financial responsibility to cover possible claims arising out of injury or damage to passengers and to persons on the ground. In June, 1953, after receiving extensive comments from air carriers, insurers and foreign governments, the C.A.B. decided not to issue such a regulation. The reason for the decision was the possible limitations of its statutory power to issue such regulations, and the facts indicated that air carriers in general now have adequate insurance coverage. The Board also did not recommend legislation "since the problem does not in light of all the facts and consideration disclosed . . . appear to require it."

Separation of subsidy from other mail pay. By Reorganization Plan No. 10 of 1953, effective October 1, 1953, the function of paying subsidy to air carriers was transferred from the Postmaster General to the Civil Aeronautics Board. The Postmaster General will continue to pay the amount payable to air carriers for the transportation of mail by aircraft and the facilities used therefor and the services connected therewith at fair and reasonable rates, fixed and determined by the Board, but the amounts in excess of those amounts will be paid by the Board.

Developments in the Law Affecting Helicopters

The time when significant developments in the law will probably occur in relation to the helicopter is still mostly in the future. To date, most production of this versatile machine has been for military uses, although a significant number are in commercial use all over the world. Three inde-

pendent common carrier services by helicopter in the United States (Los Angeles, Chicago, and New York) obtained term certificates of public convenience and necessity from the Civil Aeronautics Board several years ago. During this last year the Civil Aeronautics Board granted to one of the Nation's trunk airlines (National Airlines, Inc., Order No. E-8034) an exemption for one year to experiment in the conduct of regular helicopter service within a radius of 150 miles of Miami, Florida. This followed quite intensive interest in the helicopter as a short haul transport air bus on the part of various air lines, the Air Transport Association of America, and the International Air Transport Association. Large short-haul twin-powered 30 to 40 place helicopters have now flown and should be available in the next few years for commercial use.

States and municipalities should be prepared to adapt their local laws which have been passed to regulate fixed wing aircraft so that they will permit the helicopter to serve the people by taking full advantage of the helicopter's remarkable operating characteristics. Thus, altitude minimums, visibility minimums, airport dimensions, air traffic patterns, and numerous other fixed wing airplane requirements must be modified for the helicopter. (For example, the helicopter needs no airport runways at all.) The Federal Government already has done this but many States and municipalities have not yet acted. They should do so now.

State Legislation

The Committee is undertaking an extensive study of state aviation legislation, state court decisions, and state rules and regulations with respect to aviation. The cooperation of state and local bar associations throughout the country has been enlisted to aid the Committee in this extensive study. In the main state legislation in the aviation field relates to economic and safety regulation of aviation, airport construction by cities, airport zoning, taxation and a wide variety of other subjects. It is hoped that a report can be made upon this work at the Annual Meeting in August.

Municipal Regulations

Your Committee is also undertaking a careful study on municipal regulations which affect aviation. These chiefly relate to airport zoning, low flying airplanes, broadcasting sound from airplanes, sky-writing, and acrobatic flying. Here also the Committee will not report until this work is complete and it is hoped to complete the study in time for incorporation into the Committee's Annual Report.

Respectfully submitted,

Associate and Advisory Committee

Charles S. Rhyne, *Chairman*	Robert K. Bell
Calvin M. Cory	William S. Burton
Robert A. Detweiler	Madeline C. Dinu
Palmer Hutcheson, Jr.	Robert S. Lindsey
L. Welch Pogue	Edward C. Sweeney
Lewis F. Powell, Jr.	Gibson B. Witherspoon
Stuart G. Tipton	Alfred L. Wolf

JUDICIAL AND REGULATORY DECISIONS

COURT JURISDICTION OVER PRIVATE ANTITRUST SUITS IN THE AIR TRANSPORT INDUSTRY

IN a recent decision, a Federal District Court denied a motion to dismiss a treble damage action under the antitrust laws, brought by Slick Airlines against a group of scheduled airlines.[1] The motion was based on the ground that the acts charged as a violation of the antitrust laws[2] were regulated by the Civil Aeronautics Act,[3] and hence primary jurisdiction over the controversy resided in the Civil Aeronautics Board.[4] The Board is given the duty of regulating air transportation so as to "foster sound economic conditions"[5]; to promote the service of air carriers at reasonable rates "without unjust discrimination, undue preferences or advantages, or unfair or destructive competitive practices"[6]; and also develop competition "to the extent necessary to assure the sound development of an air transportation system" according to the needs of the commerce of the United States, the Postal Service and the National Defense.[7] Further when the Board finds that an air carrier, or ticket agent, has engaged "in unfair or deceptive practices or unfair methods of competition," it may issue a cease and desist order.[8]

Denying the motion the court held that when both the Civil Aeronautics Act and the Antitrust Acts are alleged to have been violated, jurisdiction may be retained by the court, for the purposes of proving a Sherman or Clayton Act conspiracy for treble damages, even though the legality of the acts alleged could only be determined by the Board.[9] The court advanced the theory that whatever position the Civil Aeronautics Board might adopt concerning the lawfulness of the activities, a court could make independent findings that the antitrust laws had been violated. The court distinguishes

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[1] Slick Airways, Inc. v. American Airlines, Inc., 107 F. Supp. 199 (D.N.J. 1952).

[2] Plaintiff's complaint charged the Defendants with the following:

"(a) A deliberate attempt, through predatory rate policies and a process of attrition, to waste the resources of the plaintiff and other freight carriers, and to cause them to operate at a substantial loss;

(b) The abuse of the privilege of intervention and participation in CAB proceedings controlling plaintiff's legal right and authority to engage in the air freight business;

(c) A campaign of unfair competition practices designed to appropriate the business." *Id.* at 203.

[3] 52 STAT. 977 (1938), 49 U.S.C.A. §401 *et. seq.* (1951). The Civil Aeronautics Board is created by 52 STAT. 980 (1938), 49 U.S.C.A. §421 (1951); and given its powers and duties by 52 STAT. 984 (1938), 49 U.C.C.A. §125 (1951), 52 STAT. 1018 (1938), 49 U.C.C.A. §642 (1951) gives individuals the right to contest the validity of activities covered by the Act. 52 STAT. 1024 (1938), 49 U.S.C.A. §646 (1951) provides for judicial review of the Board decisions.

[4] *Comment*, Primary Jurisdiction of the Civil Aeronautics Board in Antitrust Cases, 18 JRL. OF AIR LAW & COM. 238 (1951).

[5] 52 STAT. 980 (1938), 49 U.S.C.A. §402(b) (1951).

[6] 52 STAT. 980 (1938), 49 U.S.C.A. §402(c) (1951).

[7] 52 STAT. 980 (1938), 49 U.S.C.A. §402(d) (1951).

[8] 66 STAT. 628 (1952), 49 U.S.C.A. §491 (1953 Supp.).

[9] This holding was upheld in Slick Airlines, Inc. v. American Airlines, Inc., 204 F.2d 230 (3rd Cir. 1953) See 20 JRL. OF AIR LAW & COM. 372 (Summer, 1953). On the appeal the court held the defendant airlines could not appeal from the interlocutory judgment of the District Court. A writ of mandamus was held to be an inappropriate method of appeal since extraordinary circumstances could not be shown. There was no discussion of the merits of the controversy.

between the former as an evaluation of the legality of a method, and the latter as an adjudication as to objective.

The court would seem to be prepared to find an antitrust violation, even though there had been an administrative decision by the CAB that the practices should be permitted.[10] While the court recognizes that the Board has some power to act within the area of the antitrust laws: in several instances the Civil Aeronautics Act has made the antitrust laws inapplicable[11]; and further that the Board can approve agreements and activities within its statutory authority which will be a defense in an antitrust action "to the extent that the plaintiff sought to show as illegal conduct that which was approved by the Board"[12]; nevertheless it maintains that the Board has no power to approve a conspiracy which would violate the antitrust laws, in order to promote the special policies applicable to air transportation. That the effect of the rationale is to hamper the regulation of the industry by the CAB, can hardly be doubted.

However before jurisdiction could be retained the court had to dispose of the specific argument advanced by the defendant that primary jurisdiction rested with the Civil Aeronautics Board. The court found that since the Board could only issue a cease and desist order,[13] the plaintiff in a treble damage action would be prevented from obtaining damages until an appeal is made to the courts. The effect of the CAB action is to prevent future violations, it being unable to provide "remedial relief for past injuries," which the court in the *Slick* case held to be an inadequate remedy. Upon this basis the court held the doctrine of primary jurisdiction need not be applied.

The result in the *Slick* case as to the approach to be taken toward the primary jurisdiction question, or the problem of the effect of a CAB decision on particular acts, does not seem to be an inevitable one. Two other cases almost identical on the facts to the *Slick* case, but with different results are, *S.S.W. Inc. v. Air Transport Association of America*,[14] and *Apgar Travel Agency v. International Air Transport Association*.[15] In these two cases the courts decided that proceedings should be stayed pending an administrative decision as to the lawfulness and reasonableness of the acts in question by the CAB under the authority of the Civil Aeronautics Act. The assumption of the courts seems to be that an action under the antitrust laws involving a regulated industry, where provision for regulation of competition is made

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[10] ". . . the utilization of 'legal' means and methods in furtherance of a proscribed conspiracy in a regulated industry does not per se insulate and immunize the conspirator from the antitrust laws where they are the symptoms or incidents of an enveloping conspiracy with illegal means, . . . therefore a court can have jurisdiction over an illegal conspiracy even though effectuated by legal means and methods." Slick Airways, Inc. v. American Airlines, Inc., 107 F. Supp. 199, 216 (D.N.J. 1952), *cf.* U.S. v. N. Y. Great Atlantic and Pacific Tea Co., 137 F. 2d 459 (2d Cir. 1943), *cert. denied*, 320 U.S. 783 (1943).

[11] "Any person affected by an order made under section 488, 489, or 492 of this title, shall be, and is relieved from the operation of the antitrust laws." 52 STAT. 1004 (1938), 49 U.S.C.A. §494 (1951). In general, section 488 deals with the forms of ownership, leasing and control of air carriers, 52 STAT. 1001 (1938), 49 U.S.C.A. §488 (1951); section 489 deals with interlocking officers and directors of air carriers who have stock interests in other air carriers or corporations owning stock of other air carriers, and the sale of the securities of air carriers, 52 STAT. 1001 (1938), 49 U.S.C.A. §489 (1951); and section 494 gives the Board power to approve or disapprove contracts and agreements by air carriers which may affect air transportation, 52 STAT. 1004 (1938), 49 U.S.C.A. §492 (1951).

[12] Slick Airways, Inc. v. American Airlines, Inc., 107 F. Supp. 199, 209 (D.N.J. 1952).

[13] 66 STAT. 628 (1952), 49 U.S.C.A. §491 (1953 Supp.).

[14] 191 F. 2d 658 (D.C. Cir. 1951).

[15] 107 F. Supp. 706 (S.D. N.Y. 1952), 19 JRL. OF AIR LAW & COM. (Winter, 1953).

by Congress, should be first considered by the regulatory body. The basis for this decision seems to arise from the doctrine of primary jurisdiction as applied in *U. S. Navigation v. Cunard S.S. Co.*,[16] and related cases in other regulated areas.[17] The theory of the *Cunard* case is that when a complaint sets forth a conspiracy under the antitrust laws, and also a violation of a regulatory act, if a complete remedy has been provided under the regulatory act, if a complete remedy has been provided under the regulatory act, then primary jurisdiction should reside in the administrative body enforcing the regulatory act.[18] Using this rationale all three courts found that the Congress had failed to provide a complete remedy, *i.e.*, damages for violations are lacking. Recognizing this the courts in the *S.S.W.* and *Apgar* cases provided that until a determination by the Board, the courts would keep the actions pending, and did not feel bound to assert the primary jurisdiction in themselves.

The problem seems to lie in the answer to the question of what has been the effect of giving power of regulation over competition to the Civil Aeronautics Board. The *Apgar* opinion reads section 494 of the Civil Aeronautics Acts as giving the Board authority to make certain exemptions from the operations of the antitrust laws.[19] The court then reasons that ". . . with the broad powers of the exemption possessed by the Board under the Civil Aeronautics Act, we cannot know the extent of the exemption until the Board has acted."[20] The presumption is also made that in the determination by the Board no unconscionable result would be reached. Thus the proposition has been taken in the *S.S.W.* and *Apgar* cases that Congress intended to have the Board be the sole judge of such purely economic problems as competition and restraints of trade, and that to this extent the antitrust laws are superseded, leaving to the courts the assessment of damages,[21] after the board has acted.

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[16] 284 U.S. 474 (1952), 20 JRL. OF AIR LAW & COM.

[17] Georgia v. Penn. R.R. Co., 324 U.S. 437 (1945); Terminal Warehouse v. Penn. R.R. Co., 297 U.S. 500 (1936); Central Transfer Co. v. Terminal R.R. Association, 288 U.S. 467 (1933); Keogh v. Chicago & N.W. R.R. Co., 260 U.S. 156 (1922); Texas & Pacific R.R. Co. v. Abiline Cotton Oil Co., 204 U.S. 426 (1907).

[18] The result is reached by saying that because of later enactment of a regulatory law, the prior remedy has been superseded by the repugnancy between the two, but only to the extent of the repugnancy. Georgia v. Penn. R.R. Co., 324 U.S. 439 (1944) states that only a clear repugnancy between the old law and the new one results in the old law giving way. Mr. Justice Cardoza in Terminal Warehouse Co. v. Penn. R.R. Co., 297 U.S. 500, 514 (1936) seems to suggest a requirement of exclusiveness. "For the wrongs that it denounces (the Commerce Act) it prescribes a fitting remedy which we think was meant to be exclusive." See also U.S. Navigation Co. v. Cunard S.S. Co., 284 U.S. 474, 485 (1932). "Thus, in each case brought against a regulated company under the antitrust laws, the subject matter and remedy afforded by the regulatory statute are compared with that of the antitrust laws. If the latter either cover subject matter outside the scope of the Commission's power or provide a remedy which the Commission may not give, then they remain in effect to that limited extent."

[19] "The Board shall by order disapprove any such contract or agreement (affecting air transportation), . . . that it finds to be adverse to the public interest, or in violation of this Chapter, and shall by order approve any such contract or agreement, or any modification or cancellation thereof, that it does not find to be adverse to the public interest, or in violation of this Chapter. 52 STAT. 1004 (1938), 49 U.S.C.A. §492(b) (1951).

[20] Apgar Travel Agency v. International Air Transport Association, 107 F. Supp. 706, 710 (S.D. N.Y. 1952).

[21] "There exists a repugnancy between the subject matter of the CAA and the Sherman and Clayton Acts . . . and to that extent the latter are superseded by the former, else the entire regulatory scheme be frustrated; but since the Aeronautics Act makes no provision for the remedy of damages, that remedy of the antitrust laws remains unchanged." *Id.* at p. 711.

It would seem that this approach is sensible. Certainly it was not the intention of Congress to require full and strict adherence to the requirements of competition of the antitrust laws.[22] Further, in such a specialized area it will tend to provide a greater uniformity of regulation if the Board is allowed to set the standards of conduct, rather than have the courts interfere. Perhaps the solution is for Congress to amend the Civil Aeronautics Acts so as to provide for damages in cases of violations. But the mere absence of a damage provision need not force a court to determine the whole controversy, possibly in opposition to the policies of the Civil Aeronautics Board, as was done in the *Slick* case.

DIGESTS OF RECENT U.S. CASES

JURISDICTION — STATE REGULATION — DECLARATORY ACTION

Public Utilities Commission of California v. United Air Lines, Inc.

74 S. Ct. 151 (Nov. 30, 1953)

The California Public Utilities Commission has claimed jurisdiction over rates charged by United in its operations between the mainland and Catalina Island. The Supreme Court, in a *per curiam* decision, reversed a holding of a three judge district court in a declaratory action brought by United to test the jurisdiction of the California agency. The court below found that Congress had given the Civil Aeronautics Board authority over such rates. 109 F. Supp. 13 (N.D. Cal. 1952).

The only indication of the rationale of the Court comes from the citation of *Public Service Commission of Utah v. Wycoff*, 344 U.S. 237 (1952) as decisive of the issue involved in the litigation. In the *Wycoff* case the Supreme Court held that no case or controversy existed in a declaratory judgment action against a state administrative agency. The decision rested on the grounds that the issues involved were committed for initial decision to the administrative agency; that a decision might interfere with the actions of a state agency; and because the action was merely presenting a defense before a controversy arose.

In the principal case Mr. Justice Douglas dissented on the ground that since the issue could be settled by a rule of law, *i.e.*, by a construction of the Civil Aeronautics Act, the court should determine the jurisdiction question. The result of the case allows the Public Utilities Commission to make a determination, which will be subject to review by the Court.

FEDERAL TORT CLAIMS ACT — LACK OF NEGLIGENCE BY U.S.

United States v. Praylou
United States v. Walker

208 F. 2d 291 (4th Cir. Nov. 9, 1953)

Actions for personal and property damages resulting from the crash of two Government planes operated by Government employees while on official business. In both cases the trial court held the Government liable under a South Carolina statute which imposes absolute liability on the owner of aircraft for injuries caused by its flight, irrespective of negligence. The Government appeals on the ground that sections 1346(b) and 2674 of the

[22] "The air transportation industry is a regulated industry which, in the considered judgment of Congress, has been given a special status with relation to the antitrust laws. It is the national policy that embridled competition in that industry is not in the national interest, and the CAB has been entrusted with responsibility of making the accommodation between monopoly and competition in the public interest." *Id.* at 709.

Federal Tort Claims Act subjects the United States to liability only when there has been negligence. The Court in rejecting this contention held the State statute makes the infliction of injury or damages by the operation of an airplane itself a wrongful act giving rise to liability. The Court expressed the opinion that the Federal Tort Claims Act contemplated such result, and that the contention that the Government would only be liable when there is negligence, but the ordinary tortfeaser would be absolutely liable, would not be considered.

NEGLIGENCE — PRESUMPTION OF DUE CARE

Davis Flying Service, Inc. v. United States

114 F. Supp. 776 (W.D. Ky. Sept. 17, 1953)

Plaintiff contracted with the Government to provide to certified pilots of the Civil Aeronautics Authority the use of a Cessna 170. The contract provided that the Plaintiff was to be liable for all damage, both to the craft, third persons, or other property, "except that due to negligence on the part of Government personnel in line of duty." The Plaintiff sues to recover the value of a craft which crashed while in flight with a CAA official at the controls, the cause of the crash unknown. Plaintiff relies upon the doctrine of *res ipsa loquitor* since the record shows no basis for negligence beyond the fact that the accident happened. The Court dismissed the suit on the ground that since the accident might have been caused by any of several reasons, a presumption of due care will be applied, and that the Plaintiff had the burden under the contract of proving negligence on the part of the pilot.

RES IPSA LOQUITOR — NATIONAL SECURITY — FEDERAL TORT CLAIMS ACT

Williams v. United States

115 F. Supp. 386 (N.D. Fla. Oct. 23, 1953)

Action seeking damages for injuries sustained when a B-47 Strato-Jet Bomber of the United States Air Force caught fire and exploded over the city of Marianna, Florida. The Plaintiffs, unable to prove negligence, relied upon the doctrine of *res ipsa loquitor*. At the trial the Government called no witnesses on the ground that the national security would be imperiled. The Court gave judgment for the United States on the authority of *Dalehite v. U. S.*, 346 U. S. 15 (1953), relying on the exception of liability of section 2680(a) of the Federal Tort Claims Act, where a "discretionary function or duty" is involved. The Court assumes that the activities of the Air Force as to experiments carried on with aircraft are a cabinet level decision, and hence not the subject of suits or claims. Thus the statement as to why no evidence was submitted was sufficient to classify the action as a governmental function under section 2680(a), since to disclose facts of a defense nature to disprove negligence would presumably reveal military secrets.

EVIDENCE — PRESUMPTION OF PILOT'S DUE CARE FOR OWN SAFETY

Rennenkamp v. Blair

101 A. 2d 669 (Penn. S. Ct. Jan. 4, 1954)

Suit by the personal representative of one Swain for wrongful death in the crash of an airplane in which he was a guest passenger. The Plaintiff appeals a judgment for the Defendant *n.o.v.* At the trial Plaintiff, through the testimony of an expert witness, based on assumptions gained from an inspection of the crash, that the pilot should have returned when mechanical difficulty arose, attempted to draw the conclusion that he was negligent in not so returning. The Court in affirming the action of the trial court, held

there was no factual proof for the assumptions of the expert witness. Rather, since the pilot's duty was one of due care, the Court applied the presumption that in such an accident the pilot will exercise due care for his own safety. The Court thus assumes the pilot attempted to follow the correct procedure for one in his position, negating any negligence on his part.

DAMAGES — NOTICE OF CLAIM

Bernard v. U. S. Aircoach

117 F. Supp. 134 (S.D. Cal. Nov. 23, 1953)

Plaintiff sues for personal injuries suffered while a passenger on one of the Defendant's airplanes. The Defendant, after a pre-trial conference, filed a new defense that the action was barred because of the failure to comply with the provisions of a tariff that requires claims to be made against the airline within ninety days after any injury. The Court held the Defendant had waived the right to present such a defense, but that in any event, such a tariff provision can not be relied upon to bar recovery. Treating this tariff as an attempt to limit liability which has no basis as a requirement under the Civil Aeronautics Act or any regulation of the Civil Aeronautics Board, the Court refused to recognize any tariff requiring notice of claims against the carrier.

CIVIL AERONAUTICS BOARD — TARIFF REGULATION AMENDMENT

Amendment to Economic Regulation 221.4(g)

19 FED. REG. 509 (1953)

The Civil Aeronautics Board recently adopted the following amendment to its Regulation 221.4(g): "No provision of the Board's Regulations . . . shall be construed to require . . . the filing of any tariff rules stating any limitation on, or condition relating to, carrier's liability for personal injury or death." The Board, while reserving the authority to make such limitation effective if it desired, sought to make clear that the Board's present rules do not in any way require the filing of such tariff rules which tend to place restrictions on the bringing of suits against the airlines. Two considerations were sought to be achieved by the amendment. First, since the public does not think of aviation and air carriers in terms of special rules of bringing actions, the Board feels the better policy is to adhere to the local rules rather than to promulgate a uniform rule for the entire country. Second, the Board does not believe that the public has sufficient notice of the existence of the limitations upon liability as set out in the tariffs, and therefore their rights in bringing such suits should not be so limited.

BOOK REVIEWS

THE FEDERAL REGULATION OF TRANSPORTATION — by Carl A. Auerbach, Professor of Law, University of Wisconsin, and Nathaniel L. Nathanson, Professor of Law, Northwestern University. American Casebook Series. Warren A. Seavey, General Editor. St. Paul, Minn. West Publishing Co. 1953.

This casebook contains the most modern, up-to-the-minute compilation of materials and cases illustrating problems of public utility control. Although the authors have concentrated exclusively upon the problems of a related group of utilities, the transportation industries, their casebook could be used profitably in a course upon Public Utilities or Federal Regulations in general.

Professors of these latter general courses usually complain of the mass of materials that must be covered and of the impossibility of imparting to the student in the usual course anything more than the barest outline of the fundamental principles of utility regulation and the source of materials where they may find a solution to the specific problems that may arise. That is the inevitable result of an attempt to draw upon the whole field of utility regulation to teach a student the principles of control of public utilities.

Even in the field of transportation, the authors have omitted problems which have a more remote bearing upon control and which can best be left within the scope of other courses in law. Thus, the tort liability of the carrier to the shipper and to the public, the legal attributes of the contract between shipper and carrier and the problems of finance in the transport industries are not even broached, because they may well be left to the usual law school courses in Torts, Contracts, Corporation Finance and Corporate Reorganizations.

Excerpts from congressional reports and other authoritative materials are interspersed among the cases to give the reader a broad understanding of the economic conditions and other factors which led to the control of the various utilities. These materials are noteworthy because of their unerring pertinency and conciseness. They attest to the almost superhuman task and years of research devoted to this subject by the authors. These excerpts alone should prove invaluable to the practitioner in the field of transportation law.

Because federal regulation pioneered in the transportation industries, the student gains a deep insight into the historical development of federal regulation and the problems and causes which led to varying controls of the various transportation industries. The reader cannot escape the conclusion, at times, that some of the legislative controls and the consequent administrative policies and techniques have outlived their usefulness. While the administrative process is considered an improvement in our jural system because of its pliability and ability to adjust itself to changing conditions, it is still dependent upon the legislative will. The legislature has shown less readiness than the common law courts of old to adhere to the principle of *cessante ratione cessat et ipsa lex*. For instance, one wonders if some of the restrictions upon the activities of railroads which were imposed upon them when they were wealthy monopolies should still plague them today when they are subject to the deadly competition of trucking and aviation companies. One becomes convinced that the Civil Aeronautics Act, although relatively young, needs revamping to adjust the powers of the Civil Aeronautics Board to the new problems of this fast growing industry. The comparison and analysis of the various legislative and administrative policies

and techniques applied to the various transportation industries, all furnishing essentially the same service of transportation, will give the student of transportation law a better understanding of the subject of public utility regulation. It does more than that. The comparison brings out in bold relief the vast differences in treatment of competing carriers. The student and the expert will question the reasons for these differences and logical answers will not always be forthcoming.

While this casebook concentrates upon federal regulation to the exclusion of state regulation, the student need but apply his knowledge of constitutional law to isolate the field of state regulation. He will find that all the important problems which present themselves in the field of intrastate transportation have a counterpart and a solution in analogous cases treated by the authors.

As a casebook upon Federal Regulation of Transportation, this work has but one minor defect. It omits pipe line transportation. The authors explain this omission as follows:

> "Though the transportation of oil by pipe line is subject to regulation under part 1 of the Interstate Commerce Act, it cannot be studied, adequately, except in the context of the structure and problems of the petroleum industry, which lie outside the scope of this work. We have therefore dealt only incidentally with pipe line transportation. For similar reasons, the regulation by the Federal Power Commission of the transportation of natural gas by pipe line is not included."

One cannot escape the feeling that the authors could have selected pertinent and concise materials to acquaint the student with the structure and problems of the oil and natural gas industries, as they have so exceptionally well done with respect to the other industries which they have covered. If used as a course in Public Utilities or Federal Regulations, the casebook will not suffer from the omission of materials and cases pertaining to pipe lines. However, if it is used as a course in Federal Transportation Law, the professor and the student will undoubtedly remark as they close the book: "If only the authors had covered the pipe line field as they have other transportation industries, we would know everything we have to know about federal transportation law!" With that admittedly minor omission this casebook contains within its 1223 pages (omitting 93 pages of pertinent statutes and maps in the Appendix), the most timely, compact and complete course yet organized upon this subject. The judge and the practitioner, as well as the administrative agencies, would do well to keep this opus within their easy reach.

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HELICOPTER OPERATION AND DESIGN REQUIREMENTS — A condensed record of the Symposium on the Operation and Design Requirements of Helicopters, held during the Sixth Annual Technical Conference of IATA at Puerto Rico in April, 1953. Technical Secretariat, International Air Transport Association, Montreal 3, P. Q. Canada, 184 pp. $6.00.

There are lessons in this book for those who are willing to read it with attention. It is a compendium—probably the only one now available—of the sort of data which will be vital to city planners, municipal authorities, transport agencies and prospective operators. If they can be persuaded to

consider it now and to act upon the conclusions of the symposium, they can save themselves many headaches and perhaps a good deal of money in the future.

The report on helicopter operation and design requirements is a condensed statement of the discussions and the conclusions reached. All points of view are fully developed, and there is no attempt to disguise the fact that on many matters divergencies of opinion still exist and that to some problems no easy answers can as yet be found. The Report covers all aspects of the helicopter—helicopter design and optration, passenger handling, construction, ownership and operation of heliports, and certain economic problems.

Only a few aspects of this Report can be singled out in this brief review. At present, the greatest interest attaches to the economic possibilities of the helicopter as a means of transport which might come into fairly general use in the foreseeable future. Many conflicting points of view were expressed both at the symposium and subsequently as to the possibility of the economic operation of helicopters currently flying or in the prototype stage. These types all exhibit operating costs of a level much higher than that of conventional aircraft and current design limitations appear as yet unable to promise substantial reductions.

This question cannot, however, be considered in the abstract but in relation to the type of traffic which the helicopter is expected to carry. Obviously, there will always be room for helicopter operations at premium fares. The helicopter has proved itself invaluable as a work-horse and means of transport in difficult terrain where it is performing functions no other single form of transport can perform. Premium fare passenger services are also successful within the limits necessarily imposed by the fares charged. In general, they take the form of air taxi services operated in circumstances where the passenger is prepared to pay a very high fare for the advantages provided by the helicopter. Occasionally, it becomes possible to operate point to point services at premium fares although it is doubtful whether such operations will continue to be a success once the novelty of helicopter transportation has worn off.

Where premium fares are not charged, a subsidy is necessary to enable the helicopter operation to break even. The subsidy might take the form of a government development grant, payment for the carriage of mail or a transfer from an airline budget to its helicopter department. Such subsidies are indispensable to the helicopter in its development stage and it is certainly not to its discredit that they should be necessary.

However, there is a possibility that the way in which helicopter development has been subsidized has tended to divert attention from the more promising type of operation to services which cannot, except in the very remote future, be operated without heavy subsidy. In particular, the emphasis on the metropolitan type of operation in the United States does not appear to accord with the economic potential of such services. At premium fares such operations will always be assured of a limited volume of traffic. They would also offer unlimited possibilities should it ever become possible to offer helicopter services at commuter frequencies and fare levels. However, the in-between market which is the only one that can be envisaged for the next couple of decades appears to offer very limited prospects.

As against this, the inter-city type of operation offers greater opportunities for the immediate future. This type of operation might take the form of helicopter services either between cities which already have airports but are unduly handicapped by long journeys between terminal and airport, or between cities which are situated so close to a large airport that fixed-wing service is impracticable and exceptionally uneconomic. The ideal territory

for this type of development is a cluster of fairly large cities, each with an independent economic existence. In this sense, a large dormitory suburb is not a city, but a market center some small distance from the metropolis is one — and may well provide considerable traffic potential which has not been tapped by air transport. Indeed, the provision of helicopter service in those cases may result in the expansion of air traffic on fixed-wing routes, since convenient communications from small cities to large air traffic hubs may render it more attractive to make an entire journey by air rather than by surface transport.

It would, however, be a mistake to consider that in the foreseeable future (or even later) the helicopter will become a solution to urban traffic problems. In any case, a careful study of the safety requirements of helicopter operations tends to dispel the popular picture of the helicopter as a vehicle that can land at alternate street-corners and fly stages of a few hundred yards. Future helicopter operations will have to be conducted from suitably constructed and equipped heliports. The cost of these — though small in comparison with that of an airport in comparable circumstances — is, nevertheless, large enough to ensure that the choice and preparation of sites will be undertake with care and foresight.

It would appear, therefore, that the prospects of the helicopter depend largely on the rapidity with which suitable transport types can be developed. The main requirement is a cost of operation substantially below current levels but this economy must be achieved without any sacrifice of the essential safety features required for helicopter operation. It is important, however, that the safety requirements should be examined carefully by the operators and by the authorities responsible for their promulgation and enforcement to ensure that they are closely related to the needs and characteristics of helicopter operation and are not merely carried over from fixed-wing operation on the basis of criteria which may not be fully applicable. Greater economic development of helicopter operations, as well as substantial technical progress, can only be achieved if regulations are applied with moderation and discretion in order to ensure that the special advantages of the helicopter may be given their fullest scope. If this is the only lesson to be learned from the symposium, and if it is fully taken to heart by the authorities concerned, a great deal of progress will have been made.

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